

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Amendment of the Commission's Space Station Licensing Rules and Policies)	IB Docket No. 02-34
)	
Mitigation of Orbital Debris)	IB Docket No. 02-54

**FIRST REPORT AND ORDER AND FURTHER NOTICE
OF PROPOSED RULEMAKING IN IB DOCKET NO. 02-34,
AND FIRST REPORT AND ORDER IN IB DOCKET NO. 02-54**

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I. INTRODUCTION

1. In this Order, we revise our space station licensing process to adapt it to today's satellite environment. The procedures we adopt today significantly revamp the licensing process that we have used since the early 1980s. The new procedures will allow us to act on applications dramatically faster than we can now, and to recognize the technical growth in satellite design over the last two decades. Specifically, in this Order, we consider two proposals made in the *Space Station Reform NPRM* to expedite the satellite licensing process.¹ For reasons discussed in detail below, we adopt a queue for considering satellite applications. In addition, we find that different kinds of satellite systems raise different processing issues. Therefore, we adopt two different licensing frameworks – a modified processing round approach based on our current procedure for non-geostationary satellite orbit (NGSO)-like systems, and a "first-come, first-served" procedure for geostationary satellite orbit (GSO)-like systems. By allowing us to cut processing time from the current two-to-three years to *less than one year*, these procedures will lead to substantial public interest benefits, including faster provision of satellite services to the public, and maintenance of the United States' position as the leader of the global satellite industry.

II. EXECUTIVE SUMMARY

2. In the *Space Station Reform NPRM*, the Commission noted that the satellite industry is a crucial component of the global communications marketplace.² For example, satellites are key to wide-area distribution of the video signals of over-the-air broadcasts and cable systems to other satellite systems and directly to consumers. Satellite facilities also constitute a major component of the wireless backbone infrastructure for voice and data communications, and provide an important opportunity to create another competitive platform for delivery of broadband services. Satellite facilities are especially well suited for extending these services to rural and unserved areas.³ Satellite technology facilitates provision of Internet services, and it likely will continue to play an increasingly important role in this area. Satellite systems have also been used to provide data and voice services to mobile and handheld portable devices.

3. In the *Space Station Reform NPRM*, the Commission explained in detail why we are considering revisions to our satellite licensing procedure.⁴ We noted that there are several factors

¹ Amendment of the Commission's Space Station Licensing Rules and Policies, *Notice of Proposed Rulemaking*, IB Docket No. 02-34, 17 FCC Rcd 3847 (2002) (*Space Station Reform NPRM* or *Notice*).

² *Space Station Reform NPRM*, 17 FCC Rcd at 3849 (para. 2).

³ *Space Station Reform NPRM*, 17 FCC Rcd at 3849 (para. 2), *citing* FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service that Share Terrestrial Spectrum, *First Report and Order*, IB Docket No. 00-203, 16 FCC Rcd 11511 (2001) (*FWCC/Onsat First Report and Order*).

⁴ In this proceeding, we consider revisions to the procedure for all new satellite license applications except for Direct Broadcast Satellite (DBS) and Digital Audio Radio Satellite (DARS) licenses. *Space Station Reform NPRM*, 17 FCC Rcd at 3850 n.4. Thus, none of the rules adopted in this Order are applicable to DBS or DARS applications, including but not limited to the licensing procedure rules. Accordingly, while we adopt a mandatory electronic filing requirement for other space station

that can increase the time needed to issue satellite licenses, and one major factor is often our current use of processing rounds.⁵ This is particularly true in processing rounds in which there are not enough orbital locations and/or there is not sufficient spectrum available to accommodate all the qualified applicants, as is often the case. In those cases, we afford the applicants an opportunity to negotiate "mutually agreeable" compromises so that all the applications can be granted. Those negotiations can require several months or even years of effort.⁶

4. Changes in the satellite industry since the current procedure was adopted in the 1980s⁷ warrant consideration of proposals to accelerate the licensing process. First, the satellite industry has matured tremendously since the 1980s. For example, there are many more satellites in operation now than there were in 1980. Many of today's satellites operate in two or three frequency bands, while 1980 technology permitted only single-band satellites. Furthermore, all of today's satellites have greater capacity and operate at higher power than was possible in 1980. Other factors also weigh in favor of accelerating the licensing process. For example, the Commission noted that the International Telecommunication Union (ITU) had recently revised its procedures to require satellite operators to bring planned systems into use within seven years rather than nine as was allowed previously.⁸ The Commission also observed that the current procedure can result in long and complex licensing proceedings in cases where the licensees apply for mobile satellite service (MSS) or non-geostationary satellite orbit (NGSO) authority and request feeder link or intersatellite link authorizations in different frequency bands as well.⁹ Finally, delays in the provision of satellite services caused by the current satellite licensing procedure can impose costs on both satellite service providers and their customers.¹⁰ It also results in inefficient spectrum use because it increases the amount of time scarce orbit and spectrum resources lie fallow.¹¹

applications in Section VII.F., DBS and DARS applicants will continue to be permitted but not required to submit applications electronically. In addition, DBS license terms will remain as specified in the *Part 100 Order* rather than Section VII.I.1. of this Order. See Policies and Rules for the Direct Broadcast Satellite Service, *Report and Order*, IB Docket No. 98-21, 17 FCC Rcd 11331, 11351 (para. 39) (2002) (*Part 100 Order*). DBS licensees will continue to be required to comply with the due diligence requirements of Section 25.148(b) rather than the milestone requirements we adopt in Section VII.C. below. *Part 100 Order*, 17 FCC Rcd at 11353 (para. 44); 47 C.F.R. § 25.148(b). Nothing in the discussion of the anti-trafficking rule in Section VII.D. will apply to DBS or DARS licenses. Instead, DBS license transfers are discussed in the *Part 100 Order*, 17 FCC Rcd at 11377-78 (para. 99). Finally, neither DBS nor DARS applicants are subject to the limit on number of pending applications in Section VII.E.3., or the replacement satellite procedure in Section VII.G.

⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3850-52 (paras. 5-10). We explain processing rounds in Section III.A. below.

⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 10).

⁷ Filing of Applications for New Space Stations in the Domestic Fixed Satellite Service, *Memorandum Opinion and Order*, 93 FCC 2d 1260 (1983) (*1983 Cut-Off Order*), cited in *Space Station Reform NPRM*, 17 FCC Rcd at 3850-51 n.3.

⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3855 (paras. 19-20).

⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3853-55 (paras. 15-18).

¹⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3852-53 (paras. 12-14).

¹¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3855 (para. 21).

Streamlining the satellite licensing process would reduce those costs. Thus, the procedures we adopt today will ensure that satellite spectrum and orbital resources will be used efficiently, to the benefit of American consumers.

5. In this Order, we adopt procedural reforms to expedite the satellite licensing process. The central procedural revision in this Order is to create a single queue for all new satellite applications. We base additional reforms on our determination that one size does not fit all -- that different procedures are better suited to applications for different kinds of satellite systems. For satellites communicating with earth stations with omni-directional antennas (NGSO-like systems), we adopt a modified processing round procedure. When the application reaches the front of the queue, we will start a processing round, and divide the available spectrum equally among all the qualified applicants. This is similar to the approach used in the *2 GHz Order*.¹² For other satellite applications (GSO-like systems), we adopt the first-come, first-served approach we proposed in the *Space Station Reform NPRM*, with revisions to address some concerns raised in the record.¹³ Under both these procedures, we will be able to issue satellite licenses to qualified applicants significantly more quickly than is now possible.

6. We also adopt a number of other measures to expedite satellite licensing and provision of service to the public. For example, we adopt a streamlined procedure for replacement satellite applications.¹⁴ We strengthen our milestone requirements, which will expedite service to the public by reassigning the orbit/spectrum resource where the original licensee is unwilling or unable to construct, launch, and operate its proposed satellite system.¹⁵ In addition, we replace our current financial qualification showing with a bond-posting requirement.¹⁶ The current financial qualification requirement was designed to address whether the applicant had the financial resources needed to launch a satellite and operate it for one year.¹⁷ Our experience has been that a licensee's financial ability to implement a satellite system does not necessarily mean that it will ultimately expend its resources to that end. Finally, we remove our current restrictions on sales of satellite licenses, to facilitate transfers of licenses in the secondary market to parties that can provide a higher-valued use, but impose certain safeguards to ensure against spectrum speculation and other possible abuses.¹⁸

7. Underlying all our decisions in this Order is our long-standing policy that, as a general proposition, our regulations and procedures should not unreasonably interfere with licensees' business negotiations, and we should allow those negotiations to be based on market forces to the

¹² The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, *Report and Order*, IB Docket No. 99-81, 15 FCC Rcd 16127 (2000) (*2 GHz Order*). See also Section V.

¹³ *Space Station Reform NPRM*, 17 FCC Rcd at 3859-61 (paras. 32-39). See also Section VI.

¹⁴ Section VII.G.

¹⁵ Section VII.C.

¹⁶ Section VII.B.

¹⁷ See *Space Station Reform NPRM*, 17 FCC Rcd at 3880 (para. 100).

¹⁸ Sections VII.D. and VII.E.

extent possible.¹⁹ This is particularly true in this proceeding, in which placing greater reliance on market mechanisms in our licensing procedures should promote the interests of satellite service consumers without any significant negative effect on satellite operators. Specifically, we adopt procedures that should enable us to establish satellite licensees' operating rights clearly and quickly. We also remove unnecessary barriers to license transfers, so that satellite operators have greater flexibility to negotiate post-licensing transfers of satellite licenses in response to changing market conditions and consumer demands. As a result, licensees will be able to provide service to the public much sooner than is often possible under our current satellite licensing procedures. Customers should not have to wait for months or years while applicants identify and discuss their concerns with each other in the context of processing round negotiations. The rules adopted today rely on market mechanisms to achieve the same or substantially similar results more efficiently, on a faster time scale, and with greater administrative ease once licenses are granted. This will ensure that there is the most efficient use of the satellite spectrum and orbit resources.²⁰

III. BACKGROUND

A. Current Licensing Procedure

8. As we explained in the *Notice*, we currently issue satellite licenses in "processing rounds," a procedure by which we combine into groups and process together applications to operate satellites in a particular frequency band.²¹ The typical process is as follows: First, an

¹⁹ See Price Cap Performance Review for Local Exchange Carriers, *First Report and Order*, CC Docket No. 94-1, 10 FCC Rcd 8961, 8990-92 (paras. 67-69) (1995); Access Charge Reform, *Fifth Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 96-262, 14 FCC Rcd 14221, 14263-64 (para. 79) (1999) (*Incumbent LEC Pricing Flexibility Order*), cited in *Space Station Reform NPRM*, 17 FCC Rcd at 3866 (para. 54). In particular, in this Order below, we adopt licensing procedures to facilitate negotiations among licensees outside of a regulatory process, rather than encouraging those negotiations in the context of processing rounds as the Commission has in the past.

²⁰ In November 2002, the Spectrum Policy Task Force (SPTF) issued a Report making several recommendations to revise the Commission's spectrum management policies. See Federal Communications Commission, SPTF Report, ET Docket No. 02-135, (released Nov. 2002) (Spectrum Policy Task Force Report). This report can be found at www.fcc.gov/sptf. See also Commission Seeks Public Comment on Spectrum Policy Task Force Report, *Public Notice*, ET Docket No. 02-135, FCC 02-322 (released Nov. 25, 2002). The new satellite licensing procedures we adopt in this Order place greater reliance on market mechanisms, and so are consistent with the recommendations in the SPTF Report. SPTF Report at 56-58. In addition, the SPTF Report recommends that the Commission consider a statutory proposal for Congress that would assess and re-examine Section 647 of the Orbit Act to consider permitting, but not requiring, the Commission to utilize competitive bidding to resolve mutually exclusive applications for global and international satellite services. SPTF Report at 42. Section 647 of the Communications Satellite Act of 1962 (Satellite Act), as amended by the Open-Market Reorganization for the Betterment of International Telecommunications Act (ORBIT Act), 47 U.S.C. § 765f. Our adoption of new satellite licensing procedures should not be construed as implying any conclusion regarding this task force proposal. Moreover, nothing in this Order is intended to preclude the Commission from designating future U.S. satellite spectrum allocations for domestic satellite service only. Moreover, nothing in this Order is intended to limit the Commission from designating future U.S. satellite spectrum rights for distribution via auction consistent with our statutory authority.

²¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3850 (para. 5). The Commission also noted that it, in the past, it has used another procedure for Direct Broadcast Satellite (DBS) and Digital Audio Radio Satellite (DARS) licenses. This proceeding does not address the DBS or DARS licensing procedures. *Space Station Reform NPRM*, 17 FCC Rcd at 3850 n.4.

initial (or "lead") application for a particular service in a specific band is filed.²² After staff determines that the application is acceptable for filing, we issue a public notice announcing a "cut-off" date, a deadline for other interested parties to file any additional applications to be considered, concurrently with the lead application, as part of a group.²³ We afford an opportunity for parties to file petitions to deny, comments, and replies with respect to each applications filed.²⁴

9. On occasion, license applications in a processing round remain pending while the Commission initiates and completes a notice-and-comment rulemaking proceeding to adopt rules for the newly proposed service.²⁵ In addition, in cases where frequency bands have not been allocated internationally or domestically for a proposed service, the United States must develop and submit proposals for new frequency allocations at International Telecommunication Union (ITU) World Radio Conferences (WRCs),²⁶ and subsequently the Commission must amend its domestic Table of Frequency Allocations,²⁷ before it can act on the pending satellite license applications.²⁸

10. If there are enough orbital locations and/or there is sufficient spectrum available to accommodate the proposed satellite systems of all of the qualified applicants in the processing round, we issue licenses at that point.²⁹ If, as is often the case, there are not enough orbital locations and/or there is not sufficient spectrum available to accommodate all the qualified applicants, we afford the applicants an opportunity to negotiate "mutually agreeable" compromises so that all the applications can be granted.³⁰ Those negotiations can require several months or even years of effort.³¹ On occasion, applicants have not been able to reach mutually agreeable compromises, and the Commission has had to mandate a solution.³² This process also

²² See *Space Station Reform NPRM*, 17 FCC Rcd at 3850 (para. 6).

²³ See *Space Station Reform NPRM*, 17 FCC Rcd at 3850 (para. 6), citing *1983 Cut-Off Order*, 93 FCC 2d 1260.

²⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3850 (para. 6).

²⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3850-51 (para. 7).

²⁶ WRCs are held approximately every two or three years. *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 9).

²⁷ 47 C.F.R. § 2.106.

²⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 9).

²⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 10). The Commission dismisses applications when it finds that the applicant is not legally, financially, or technically qualified to hold a satellite license. See, e.g., *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 10).

³⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 10).

³¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 10).

³² *Space Station Reform NPRM*, 17 FCC Rcd at 3852 (para. 10), citing *2 GHz Order*, 15 FCC Rcd 16127.

requires the completion of a notice-and-comment rulemaking proceeding to implement an assignment scheme consistent with the negotiated agreement or, in cases where no agreement is reached, a Commission approach to resolving mutual exclusivity among the competing applicants. Developing proposals in a Notice of Proposed Rulemaking, reviewing comments, and finalizing rules in a Report and Order can also be time-consuming.

B. Proposed Revisions to Satellite Licensing Procedure

11. Certain factors outside our control can lengthen the time needed to grant a license. These include the time necessary to pursue and obtain new international allocations for satellite services pursuant to ITU procedures. Rather than concentrate on those factors where the Commission's ability to shorten the time involved is limited, we have focused our efforts on those licensing areas that are within our control.³³

12. Accordingly, the *Notice* invited comment on two proposals that would shorten the time required to act on space station applications by either eliminating, or limiting, the opportunity for negotiations among applicants. Specifically, we invited comment on two alternatives for revising our satellite processing procedure. The first option is a first-come, first-served approach, based in large part on the procedure we used for FM radio and television licenses from 1985 to 1998.³⁴ The second option is to reform and streamline our current processing round procedure.³⁵

13. For the reasons set forth below in Section IV., we conclude that license applications for different types of satellites raise distinct issues that can be resolved most effectively in procedures adapted to those issues. Specifically, we find that applications for certain satellite systems are best considered in a modified processing round, while others are best considered in a first-come, first-served approach. In Section V., we establish a single queue for all new satellite applications, and we set forth our modified processing round procedure in detail. We discuss our first-come, first-served procedure in Section VI. In Section VII., we adopt other revisions to our space station licensing rules, including replacing our current financial qualification requirements with a bond, eliminating the satellite anti-trafficking rules, strengthening our milestone requirements, and adopting safeguards to protect against speculative satellite applications. We revise our procedures for non-U.S.-licensed satellite operators seeking access to the U.S. market in Section VIII., to be consistent with our procedures for U.S.-licensed satellite operators that we adopt herein.³⁶ Section IX. is a conclusion for the Report and Order. Finally, in Section X., we

³³ *Space Station Reform NPRM*, 17 FCC Rcd at 3856 (para. 25).

³⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3857-71 (paras. 28-66), citing Amendment of the Rules Concerning Cut-Off Procedures for FM and TV Broadcast Stations, *Report and Order*, MM Docket No. 84-750, FCC 85-125, 50 Fed. Reg. 19936, 19941-42 (paras. 33-36) (May 13, 1985) (*TV and FM Broadcast Order*), *recon. denied*, 50 Fed. Reg. 43157 (Oct. 24, 1985), *aff'd without published opinion sub nom. Hilding v. FCC*, 835 F.2d 1435 (9th Cir. 1987), *reprinted at* 58 Rad. Reg. 2d 776 (1985). In *Hilding*, the Court rejected the petitioner's challenge of the broadcast first-come, first-served rule because it found that the Commission reasonably concluded that its rules balanced the competing public interest concerns better than alternative rules proposed by the petitioner.

³⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3871-75 (paras. 67-83).

³⁶ In the *Space Station Reform NPRM*, we proposed revisions to Schedule S, a standardized space station licensing form initially proposed in another proceeding. See *Space Station Reform NPRM*, 17 FCC Rcd at 3875-79 (paras. 84-94); 2000 Biennial Regulatory Review -- Streamlining and Other Revisions

adopt a Further Notice of Proposed Rulemaking to invite additional comment on the details of the bond requirement.

IV. PRELIMINARY ISSUES

A. Need for Reform

14. *Background.* Several commenters claim that we need to make only slight revisions to our satellite licensing procedures.³⁷ Many of these parties note that the Commission has relied on processing rounds for many years (since 1983) with good results. For example, a number of parties claim that processing rounds have enabled the Commission to license as many satellite operators as possible given limited satellite spectrum.³⁸ Teledesic argues that, while processing rounds have been successful in the past, they have become too slow to be a good means for issuing satellite licenses.³⁹ Teledesic maintains that any proposals to streamline or facilitate processing rounds are misplaced because, regardless of whether or to what extent the processing round procedure can be improved, the first-come, first-served procedure would produce a better result.⁴⁰ Teledesic contends that processing rounds discourage innovative satellite proposals by grouping them together with applications from parties who may not have any interest in moving forward with their proposed satellite systems.⁴¹ SES Americom replies that Teledesic overstates the delays of processing rounds, and overstates the time savings of the first-come, first-served approach.⁴²

15. Hughes and PanAmSat argue that delays in licensing are often not the result of processing rounds, but rather spectrum allocation or service rule proceedings.⁴³ Hughes also

of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations, *Notice of Proposed Rulemaking*, IB Docket No. 00-248, 15 FCC Rcd 25128, 25191-25201 (App. C) (2000) (*Part 25 Earth Station Streamlining NPRM*). We will consider comments filed in response to the revised Schedule S in a future Order, as well as our proposal to require non-U.S.-licensed satellite operators seeking access to the U.S. market to complete Schedule S. *See Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 127). In a future Order, we will also consider some commenters' proposals that may require revisions to Schedule S, such as a streamlined procedure for some space station modification applications. *See, e.g.*, SIA Comments at 20-21; Teledesic Space Station Comments at 26-27; Intelsat Comments at 21.

³⁷ *See* Hughes Comments at 47; SIA Comments at 14; SES Americom Reply at 11-12; PanAmSat Comments at 10; Intelsat Reply at 6-7; PanAmSat Reply at 3-4.

³⁸ SIA Comments at 5-6; Hughes Comments at 2-3; PanAmSat Comments at 8-9. *See also* Boeing Comments at 5-6, 10.

³⁹ Teledesic Comments at 2-5. *See also* Intelsat Comments at 5-6.

⁴⁰ Teledesic Comments at 34-35.

⁴¹ Teledesic Comments at 5.

⁴² SES Americom Reply at 8-9.

⁴³ Hughes Comments at 3-4, 33; PanAmSat Comments at 9.

questions the Commission's reasons in the *Notice* for considering revisions to the satellite licensing process.⁴⁴

16. *Discussion.* We disagree with commenters that assert that we should limit our consideration to minor revisions to the satellite licensing process. We explained in the *Notice* that the negotiations among applicants are usually time consuming and not always successful.⁴⁵ In these cases, the Commission must develop a framework for resolving mutual exclusivity among the applicants. Such a framework is generally adopted in a notice-and-comment rulemaking proceeding. This process (negotiations and rulemaking) has generally taken two to three years, or more.⁴⁶ These delays impose real and substantial economic costs on satellite customers as well as service providers.⁴⁷ Alternatively, in this Order, we move away from a highly regulatory procedure to a more market-based approach. Furthermore, the International Telecommunication Union (ITU) has shortened its bringing-into-use date by two years,⁴⁸ which prompts us to expedite our licensing procedures as much as possible. In addition to these public interest benefits, we also noted that, given the important role the satellite industry plays in the U.S. and world economy, the public interest demands that we continually review our procedures and improve them whenever possible.⁴⁹ Moreover, in another context, at least one applicant has criticized the length of the current processing round procedure.⁵⁰ Finally, our experience has shown that satellite licensees need about three to six years to construct and launch satellite systems. Given the now-seven-year ITU deadline for bringing planned satellites into use, we need to expedite the licensing process dramatically. Accordingly, we conclude that we must reform the current satellite licensing procedure.

17. Furthermore, while Hughes and PanAmSat are correct that we could issue satellite licenses more quickly if we could expedite spectrum allocation and service rule proceedings, this observation does not provide a sufficient reason to defer needed revisions of the satellite licensing process. Moreover, as we noted in the *Space Station Reform NPRM*, attempting to streamline the spectrum allocation and service rule procedures in addition to the satellite licensing process would be unwieldy.⁵¹ Thus, it is reasonable to address these issues one at a time, and to address the satellite licensing process first. Moreover, we adopt measures in this Order to limit the delays

⁴⁴ Hughes Comments at 5-8.

⁴⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3851-52 (para. 10).

⁴⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3871-72 (para. 68).

⁴⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3852-53 (paras. 12-14).

⁴⁸ The ITU's Radio Regulations requires ITU member nations to bring their proposed satellite systems into use within five years of the date the nation informed the ITU of its intent to construct and operate that satellite system. This deadline can be extended to seven years under certain circumstances. Failure to meet the bringing-into-use date causes the member nation to lose its priority relative to other member nations' proposed satellite systems.

⁴⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3856 (para. 22).

⁵⁰ See Letter from Peter Allen, Director, Pacific Century Group, to Jennifer Gilsenan, Chief, Policy Branch, Satellite Division, International Bureau, FCC (dated Sept. 19, 2002) (describing the Second Ka-band processing round as "unfortunately all too lengthy").

⁵¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3856 (para. 25).

caused by frequency allocation and service rule proceedings. For applications filed before the ITU has adopted an international frequency allocation, we decide in this Order to return the application without prejudice as premature.⁵² We also adopt commenters' recommendations to create generic, default service rules to apply in cases where we grant applications filed in the absence of specific service rules.⁵³ Accordingly, we do not expect either frequency allocation proceedings or service rule proceedings to delay our actions on satellite applications as much as they have in the past. In any case, we may consider exploring other options for expediting service rule proceedings in the future.

B. General Framework

18. *Background.* In the *Notice*, we invited comment on two general approaches for revising the current satellite licensing procedure. One of those approaches is the first-come, first-served approach, in which we are to process satellite applications one at a time in the order that they are filed.⁵⁴ The other approach modifies and streamlines the current processing round procedure by placing a time limit on negotiations in processing rounds, or establishes a sharing mechanism that would clarify the operating rights of the prospective licensees, and so reduces or eliminates the need for processing round negotiations.⁵⁵

19. *Discussion.* Intelsat proposes something it calls the modified first-come, first-served procedure.⁵⁶ Intelsat recommends applying its procedure only to new license applications for orbital locations and spectrum with established service rules and frequency allocations, such as the C-band, Ku-band, and Ka-band, but not to services where band-segmentation is preferable, such as MSS and possibly NGSO satellite constellation applications.⁵⁷ In other words, Intelsat would not apply a first-come, first-served procedure to applications for authority to operate in a frequency band where needed service rules or allocations have not yet been adopted.⁵⁸ SES Americom argues that limiting the first-come, first-served proposal to "established bands" would not address any of the concerns that commenters have raised about potential for speculation in or the legal basis for a first-come, first-served procedure.⁵⁹ SES Americom also questions whether a satellite service should be considered "established" as soon as the Commission adopts service

⁵² Sections VI.D.1. and VI.E.1.e. below.

⁵³ Sections V.D.1. and VI.E.1.d. below.

⁵⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3857-71 (paras. 28-66).

⁵⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3871-75 (paras. 67-83).

⁵⁶ Intelsat Comments at 8. Intelsat intends all the proposals in its "modified first-come, first-served" approach to be considered together as a single package. Intelsat Comments at 3. For reasons discussed below, we cannot adopt all the elements in Intelsat's proposal. Section VI.F. We find, however, that adoption of some of Intelsat's proposals would further the public interest even if we do not adopt everything in Intelsat's proposal. Accordingly, we will consider the individual elements of Intelsat's proposal on a case-by-case basis.

⁵⁷ Intelsat Comments at 9-10.

⁵⁸ Intelsat Comments at 9-10.

⁵⁹ SES Americom Reply at 14-15.

rules and frequency allocations.⁶⁰ Although PanAmSat supports retaining processing rounds over a first-come, first-served procedure, PanAmSat makes a point very similar to Intelsat. PanAmSat argues that different factors may be relevant in processing rounds for different kinds of satellite licenses, such as NGSO or GSO, FSS or MSS.⁶¹ Telesat argues that operators of non-U.S.-licensed GSO FSS satellites seeking access to the U.S. market should be subject to a different procedure than other non-U.S.-licensed satellite operators.⁶²

20. Intelsat and PanAmSat raise a very good point, in that different kinds of satellite applications raise different kinds of issues, and therefore it may be reasonable to adopt different procedures to address the issues raised by each kind of satellite application. We also agree with SES Americom, however, that Intelsat's proposal to apply different procedures to applications for satellites in "established" and "unestablished" frequency bands may not be the best way to classify satellite applications. Rather, we find that Intelsat's comment is very relevant when it noted that satellite applications for which band segmentation is preferable should be considered pursuant to a different procedure than other satellite applications.

21. The framework we adopt in this proceeding is based on Intelsat's observation that band segmentation is preferable for some but not all satellite applications. The classification we adopt here is based on a refinement of Intelsat's observation that MSS and NGSO applications raise different issues than other satellite applications.⁶³ Rather than adopting Intelsat's classification, however, we conclude that the classification should be as follows: (1) NGSO satellite constellations and GSO satellites communicating with earth stations with omnidirectional antennas, and (2) GSO satellites communicating with earth stations with non-omnidirectional antennas. For purposes of this Order, we refer to these types of satellite applications as "NGSO-like" and "GSO-like" applications, respectively. NGSO-like satellite systems are those in which the earth station has little or no directivity towards a satellite, so that the earth station must track the satellite in all directions, such as hand-held satellite telephones. NGSO systems generally cannot operate on the same spectrum without causing unacceptable interference to each other. Examples of GSO-like satellite systems are those which use earth stations with antennas with directivity towards the satellites, such as FSS, and MSS feeder links which use GSO satellites. GSO satellites can operate on the same spectrum at two-degree orbit spacings.

22. This NGSO-like classification better describes the universe of satellite applications for which band segmentation is preferable because it promotes better our goal of trying to license as many satellite systems as possible, so that there is as much competition as possible for each satellite service. If we adopted a first-come, first-served procedure for NGSO-like satellite applications, the first qualified applicant could request authority to operate in so much of the orbit-spectrum resource that additional market entry would be precluded. In these cases, therefore, band segmentation is preferable because it facilitates the potential for competitive market entry. For GSO-like satellite applications, however, licensees are usually authorized to operate throughout the frequency band. Thus, large spectrum requests in GSO-like satellite

⁶⁰ SES Americom Reply at 15-16.

⁶¹ PanAmSat Comments at 13.

⁶² Telesat Comments at 4-5.

⁶³ Intelsat Comments at 9-10.

applications do not by themselves preclude additional market entry. Accordingly, we adopt a first-come, first-served procedure for GSO-like satellite applications. We explain these conclusions in Sections V. and VI. below.

V. MODIFIED PROCESSING ROUNDS FOR NGSO-LIKE SATELLITE SYSTEMS

A. Overview

23. As we explained above, the Commission proposed two general approaches for updating and expediting our satellite licensing process. One was the first-come, first-served approach,⁶⁴ and the other approach was to modify the current processing round procedure. We proposed several modifications, including placing a 60-day time limit on those negotiations,⁶⁵ adopting criteria for selecting among applicants if the negotiations fail,⁶⁶ and establishing a sharing mechanism that would clarify the operating rights of the prospective licensees, and so reduce the need for negotiations.⁶⁷ We adopt a modified processing round approach using a spectrum-splitting framework for applications for NGSO-like satellite applications. We find further that the first-come, first-served approach is not well suited to this kind of satellite system.

B. Opportunities for Competitive Entry for NGSO-Like Satellite Systems

24. *Background.* In the *Notice*, the Commission invited comment on applying a first-come, first-served procedure to both NGSO-like and GSO-like satellite applications. Under a first-come, first-served approach, the first-filed acceptable application for a particular satellite license would be considered before considering other applications requesting to use the same spectrum.⁶⁸ Under this procedure, we would issue a public notice inviting comment on the lead application. Subsequently filed applications would be included in a queue according to their sequential date of filing. If for any reason we could not grant the lead application, we would dismiss the lead application and consider the next application in the queue and continue this process until we could grant an application.⁶⁹

25. The Commission recognized the possibility that the first applicant in the queue could seek authority for so much spectrum that future service providers could be unreasonably precluded from the market.⁷⁰ This is especially true with respect to NGSO-like satellite systems, in which licensing one satellite system operator to provide service in a particular frequency band segment precludes other satellite system operators from providing service in that frequency band

⁶⁴ This approach is described in detail in the *Space Station Reform NPRM*, 17 FCC Rcd at 3859-61 (paras. 32-40), and in this Order below.

⁶⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3872 (para. 70).

⁶⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3872-73 (paras. 70-76).

⁶⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3873-74 (para. 78).

⁶⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 32).

⁶⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 33).

⁷⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 36).

segment.⁷¹ The Commission suggested that this issue could be addressed by limiting the amount of the spectrum-orbit resource granted to each applicant to the amount needed to provide the proposed service. The Commission also proposed to determine the appropriate amount of spectrum in the context of service rule proceedings, and invited parties to propose methods or criteria for making such determinations.⁷²

26. We received several comments on the first-come, first-served procedure. We address those comments in detail below.⁷³ Here, we focus on comments related to using rulemaking proceedings to determine the amount of spectrum needed to provide a service. Based on those comments, we conclude that a revised processing round approach using a pre-established sharing mechanism is better suited for NGSO-like satellite systems than the first-come, first-served procedure is.

27. *Discussion.* Boeing argues that it would be virtually impossible for the Commission to determine the precise amount of spectrum necessary to provide a particular service on a case-by-case basis.⁷⁴ Hughes maintains that determining reasonable spectrum limits in service rules proceedings would force those proceedings to take on all the characteristics of processing rounds, and so would not reduce the time needed to issue licenses.⁷⁵ SES Americom argues that a rulemaking proceeding is not a good forum for determining the amount of bandwidth needed by an applicant in a first-come, first-served procedure. This is because, according to SES Americom, comments in the rulemaking proceeding would be unduly influenced by the commenters' place in the queue, rather than on engineering or economic considerations. In other words, according to SES Americom, commenters who are near the front of the queue would have an incentive to argue that more spectrum is necessary to preclude other applicants from obtaining bandwidth, while commenters near the end of the queue would have an incentive to argue that less spectrum is necessary, to try to ensure that spectrum is still available by the time they reach the front of the queue.⁷⁶ Telesat argues that, in some cases, it would not be in the public interest to grant the entire available spectrum to the first applicant in the queue, and so suggests the band-splitting procedure used in the 2 GHz proceeding in those cases.⁷⁷

28. Teledesic argues that a first-come, first-served procedure would not give the first applicant the ability to monopolize new services, because the Commission can deny "excessive" applications, grant such applications in part, or condition licenses on compliance with future

⁷¹ This is because NGSO-like satellite systems use earth stations that cannot discriminate between satellites when there is an in-line event for NGSOs. In other words, the earth stations have no isolation, as a result of their lack of directivity.

⁷² *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 36).

⁷³ Section VI.D.

⁷⁴ Boeing Comments at 7-8.

⁷⁵ Hughes Comments at 34.

⁷⁶ SES Americom Comments at 6-7.

⁷⁷ Telesat Comments at 3.

rulemakings.⁷⁸ Teledesic contends further that the Commission will need to consider issues of spectrum efficiency and spectrum excess regardless of whether the Commission adopts a first-come, first-served procedure, and that the Commission would be able to resolve those issues more easily if the Commission can "de-link" several applications on file and address the spectrum issue "head-on."⁷⁹ CTIA also advocates limiting spectrum assignments in service rule proceedings, and recommends using those proceedings to consider reallocating spectrum to other uses.⁸⁰ Teledesic and CTIA do not, however, provide any suggestions for methods or criteria for determining the amount of spectrum that can reasonably be considered "excessive" in the context of service rule proceedings.

29. The amount of spectrum a particular satellite operator would need to provide a particular service depends on the satellite operator's system design itself and the operator's business assessments of the service to be provided. Given the innovative designs, unique niche markets targeted by each operator, and cutting edge technology, we have not attempted to evaluate each licensee's individual spectrum needs. Rather, we have relied on market mechanisms to the extent possible. Rather than attempting to judge whether an applicant has justified its spectrum request in a first-come, first-served procedure, we believe that a more efficient way of awarding spectrum for NGSO-like systems is through a modified processing round approach with a pre-set band-splitting mechanism. This, together with eliminating the anti-trafficking rule for satellite licenses and adopting safeguards against speculation, will allow the secondary market to determine the appropriate amount of spectrum for each NGSO-like system. Accordingly, we adopt Telesat's recommendation to apply a modified processing round procedure using a band-splitting approach to NGSO-like satellite system applications.

C. Modification of Processing Round Procedure

1. Sharing Mechanism

30. *Background.* Having determined to implement a modified processing round approach using a band-splitting framework, we must decide how to divide the available spectrum among the competing applicants. The Commission's proposed sharing mechanism is based on the method it used in the *2 GHz Order* to resolve mutually exclusive situations.⁸¹ Under this approach, once we receive an application to use particular spectrum, we would issue a public notice establishing a cut-off date for additional applications to be considered together with the "lead" application. After the cut-off date has passed, we would dismiss any applications that are

⁷⁸ Teledesic Comments at 11-12, *citing* Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, *Memorandum Opinion and Order*, 94 FCC 2d 129, 137 (para. 19) (1983) (denying an application deemed to be excessive); Loral Orion Services, Inc., *Order and Authorization*, 14 FCC Rcd 17665 (Int'l Bur., 1999) (granting authority to launch satellite and conduct in-orbit testing, but denying authority to provide commercial service, without prejudice); PanAmSat Licensee Corp., *Order and Authorization*, 13 FCC Rcd 1405, 1414 (para. 27) (Int'l Bur. 1997) (license conditioned on outcome of future rulemaking proceeding).

⁷⁹ Teledesic Reply at 22-23.

⁸⁰ CTIA Comments at 6-7.

⁸¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3873-74 (para. 78), *citing 2 GHz Order*, 15 FCC Rcd at 16138 (para. 16).

not "acceptable for filing."⁸² After we have placed the remaining applications on public notice, we would deny any applications that do not demonstrate that the applicant is qualified to operate a satellite system under the Commission's rules. If spectrum sufficient to accommodate the remaining applicants is not available, we would divide the available spectrum equally among those applicants.⁸³

31. *Discussion.* SIA argues that a modified processing round procedure of the kind the Commission adopted in the *2 GHz Order* may not always be the best method for resolving mutually exclusive situations.⁸⁴ Teledesic asserts that it is unreasonable to conclude that this procedure would allow applicants an adequate amount of spectrum regardless of the number of applicants.⁸⁵

32. We conclude that dividing the available spectrum equally among the qualified applicants is the best way of issuing licenses for NGSO-like satellite systems quickly and fairly. Neither SIA nor Teledesic has persuaded us otherwise. We explained in the *Space Station Reform NPRM* and in this Order above that there is considerable public interest harm that can result from a very long licensing procedure.⁸⁶ If we do not adopt a pre-set method of assigning bandwidth to satellite system applicants, then we will need to continue to base bandwidth assignments on lengthy applicant negotiations, which can take years to complete. We would effectively be allowing one or more applicants in a processing round to delay service to the public while they develop a spectrum sharing arrangement. Thus, we need to adopt a pre-set method of assigning bandwidth to achieve a primary goal of this proceeding, to expedite the satellite licensing process. Further, as we discussed above, it is difficult to determine the amount of spectrum a particular satellite operator would need to provide a particular service.⁸⁷ Thus, to the extent that Teledesic contends that the Commission should determine the amount of spectrum that would be adequate for each applicant, we reject that proposal because it would delay licenses and service to the public more than the current procedure.

33. In addition, we disagree that this procedure would not provide licensees with sufficient spectrum for their systems. We eliminate the anti-trafficking rule as part of our package of licensing reforms,⁸⁸ and so licensees will be free to purchase spectrum rights from

⁸² In other words, we proposed dismissing applications that do not meet all the applicable information requirements.

⁸³ *Space Station Reform NPRM*, 17 FCC Rcd at 3873-74 (para. 78). We also proposed this procedure in the context of the first-come, first-served approach, as a second-tier selection mechanism in the event that we adopt a first-come, first-served procedure in which we may need to consider two or more satellite applications together. *Space Station Reform NPRM*, 17 FCC Rcd at 3863-64 (paras. 46-48). We discuss this issue in Section VI.E.2. below.

⁸⁴ SIA Comments at 16.

⁸⁵ Teledesic Comments at 32-33.

⁸⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3852-56 (paras. 11-23); Section IV.A. above.

⁸⁷ Section V.B., above.

⁸⁸ Section VII.D.

another licensee after licenses have been issued if they believe that they have not been awarded sufficient spectrum, provided that they comply with all applicable rules governing that license, including but not limited to the milestone requirements, performance bond, and limits on pending applications and unbuilt satellites adopted in this Order below. Alternatively, the parties are free to develop spectrum-sharing arrangements. Thus, by dividing the spectrum equally among qualified applicants, we do not need to rely on a lengthy and complicated rulemaking proceeding, or regulatory fiat, to determine the proper amount of spectrum to give to each applicant. Rather, we rely on a market mechanism, *i.e.*, the purchase of additional spectrum from other licensees, which should produce a reasonable result more quickly and with fewer administrative burdens than any other alternative presented in this record.

34. In summary, we conclude that the modified processing round procedure with the sharing mechanism we adopt here, together with a policy that allows licensees to buy or sell licenses freely, should result not only in faster licensing but faster deployment of satellite systems.

2. Facilitating Processing Round Negotiations

a. Time Limit on Negotiations

35. *Background.* As an alternative to adopting a specific sharing mechanism, we sought comment on placing a time limit on negotiations in the context of processing rounds, such as 60 days after the record closes on applications filed on the cut-off date, for the parties to negotiate a plan to accommodate all the applicants. If the parties could not reach an agreement by that time, we would determine which applications to grant based on specific criteria.⁸⁹ Alternatively, in the absence of an agreement, we would divide the spectrum as discussed above.⁹⁰

36. *Discussion.* Teledesic argues that many applications filed in processing rounds are speculative, and parties filing such applications have no interest in reaching a negotiated agreement. As a result, according to Teledesic, efforts to facilitate negotiations by placing a time limit on negotiations cannot succeed.⁹¹ SES Americom denies that satellite applicants in processing rounds have no interest in reaching a negotiated agreement.⁹²

37. Hughes observes that a processing round is a zero-sum game, and compares processing rounds to a game of "chicken" in which parties "posture and dig in – claiming that they'll never swerve, they actually like car crashes, and so on – until the absolute last instant, just before the two cars collide."⁹³ Nevertheless, Hughes and other parties support placing a time limit on negotiations in processing rounds, and claim that no other licensing procedure reforms

⁸⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3872-73 (paras. 71-76).

⁹⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3873-74 (para. 78).

⁹¹ Teledesic Comments at 31.

⁹² SES Americom Reply at 10-11.

⁹³ Hughes Comments at 35.

are needed.⁹⁴ CTIA claims that a time limit on negotiations would help speed the process, but would not discourage speculative applications.⁹⁵

38. Teledesic's and Hughes's observations weigh heavily against adopting any negotiation period, either as part of the sharing approach adopted above or together with the system of preferences we proposed in the *Notice*,⁹⁶ as discussed below. In particular, Hughes's description of applicants' behavior in processing round negotiations suggests that any mandated negotiation period would have no effect other than delaying our actions on the satellite applications. Although this delay would be limited to 60 days, we do not believe that there is any public interest benefit that is significant enough to justify even a limited delay. Furthermore, as we noted above, this procedure does not preclude negotiations among licensees after we issue licenses. In fact, quickly issuing licenses and clarifying licensees' operating rights and responsibilities should facilitate subsequent negotiations more than a time limit on negotiations would. As we noted above, establishing a clear delimitation of rights and responsibilities provides a necessary basis for negotiations regarding the possible purchase and sale of those rights.⁹⁷ In addition, applicants may negotiate before or after we issue licenses. If the applicants present a frequency band assignment plan to the Commission before it acts on the applications, the Commission will consider that plan. For the reasons set forth below, however, we will not delay our procedures if the applicants cannot complete their negotiations by the time we are ready to issue licenses.⁹⁸

b. System of Preferences

39. *Background.* In the *Notice*, we invited comment on adopting criteria for selecting among applicants in a processing round in the event that the applicants cannot reach a negotiated agreement. We noted that we currently have one such criterion in our rules, in that GSO satellite operators with licenses for two unbuilt satellites in a particular frequency band may not apply for another satellite license in that band.⁹⁹ We requested parties to discuss additional criteria. For example, we invited comment on establishing a preference for new entrants over existing licensees.¹⁰⁰ We also proposed giving a preference to satellite operators who have not missed a milestone in the past five years, who have already made progress in constructing a satellite, who

⁹⁴ Hughes Comments at 47. *See also* SIA Comments at 14 (supporting a limit of 60 to 90 days); SES Americom Reply at 11-12 (60 to 90 day limit); PanAmSat Comments at 10 (supporting a limit "such as 60 days"); Intelsat Reply at 6-7; PanAmSat Reply at 3-4.

⁹⁵ CTIA Comments at 4.

⁹⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3872-73 (paras. 70-76).

⁹⁷ Section V.C.2., *citing Space Station Reform NPRM*, 17 FCC Rcd at 3864 (para. 50); Coase, *Social Cost*, 3 J.L. & Econ. at 8; Coase, *FCC*, 2 J.L. & Econ. at 25.

⁹⁸ *See* Section V.C.2.d. below.

⁹⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3872 (para. 70), *citing* 47 C.F.R. §§ 25.140(e), (f).

¹⁰⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3872 (para. 71).

have made a commitment to provide service to rural and unserved areas, and who filed applications before the end of the cut-off period.¹⁰¹

40. *Discussion.* Several parties argue that many if not all of the Commission's proposed criteria would be at best difficult to apply, and so would not make it easier to complete a processing round.¹⁰² Intelsat urges the Commission to develop selection criteria different from the criteria proposed in the *Notice*. It argues that the difficulty in developing workable criteria weighs in favor of a first-come, first-served approach.¹⁰³ Pegasus supports a preference for new entrants and a limit on unbuilt satellites to two initial GSO orbit locations in each frequency band, but maintains that the other criteria proposed in the *Notice* support no sound policy objective or are susceptible to gaming.¹⁰⁴ PanAmSat argues that the limit on unbuilt satellites should help avoid most mutually exclusive situations, but advocates adoption of one or more of the criteria proposed in the *Notice* in the event that mutually exclusive situations arise.¹⁰⁵

41. We agree with commenters who argue that many of the criteria we proposed in the *Space Station Reform NPRM* would be difficult to apply. Moreover, applying any of the criteria proposed in the *Notice* would not streamline our licensing procedure as well as the modified processing round procedure we adopt above for NGSO-like satellite system applications. In addition, the criteria may not accurately reflect who will actually construct, launch, and operate a satellite system, and may therefore delay service to the public. Accordingly, we will not adopt the proposal to decide among applicants in a processing round based on any of the criteria suggested in the *Notice*.

c. Other Proposals for Facilitating Negotiations in Processing Rounds

42. Hughes suggests that the Commission take on a mediator role during satellite applicants' negotiations, giving parties in processing rounds informal opinions regarding their relative positions.¹⁰⁶ Although this might facilitate the negotiations in some cases, it would not facilitate the satellite licensing process as well as the sharing mechanism we adopt above, nor would it lead to a better result than the sharing mechanism we adopt above, together with the freedom to buy and sell spectrum after licenses are granted. In fact, issuing licenses quickly pursuant to the procedure we adopt above, and thereby clarifying licensees' operating rights and responsibilities, should facilitate negotiations more effectively than the Commission could if it assumed the mediator role proposed by Hughes.¹⁰⁷

¹⁰¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3873 (paras. 72-75).

¹⁰² Teledesic Comments at 31-32; SIA Comments at 35-37; Hughes Comments at 37-42; Pegasus Comments at 5-6; Intelsat Reply at 7-9.

¹⁰³ Intelsat Reply at 9.

¹⁰⁴ Pegasus Comments at 5-6.

¹⁰⁵ PanAmSat Comments at 12-13.

¹⁰⁶ Hughes Comments at 47-48.

¹⁰⁷ Section V.C.2., *citing* Coase, *Social Cost*, 3 J.L. & Econ. at 8; Coase, *FCC*, 2 J.L. & Econ. at 25.

43. SIA recommends prohibiting *ex parte* statements filed more than 30 days after the end of the negotiation period.¹⁰⁸ In light of our decision to adopt a pre-set sharing mechanism rather than a negotiation period, there is no need to consider SIA's proposal further.

d. Need for Pre-Licensing Negotiations

44. Several commenters question whether we should adopt any licensing procedure that does not base the resulting licenses on applicant negotiations. SIA contends that the Commission's band-splitting proposal may not always be the best method for resolving mutually exclusive situations.¹⁰⁹ SIA argues further that the modified processing round procedure ignores the preferences of applicants and the potential for alternative spectrum sharing arrangements.¹¹⁰ Similarly, Teledesic argues that, in the event that we adopt a procedure that allows for mutually exclusive applications to be considered together, we should allow negotiations and not limit them to a 60-day period.¹¹¹ Hughes and PanAmSat recommend that the Commission mediate the applicants' negotiations rather than adopt predictable rules governing bandwidth assignments in processing rounds.¹¹²

45. We disagree with SIA and other commenters that we should delay issuing licenses until the applicants have completed negotiations. As an initial matter, nothing in this proceeding precludes licensees from negotiating alternative agreements to redistribute bandwidth among licensees after licenses have been issued. Rather, in this Order below, we eliminate the anti-trafficking rule in part to facilitate such negotiations.¹¹³ Furthermore, as we observed in the *Notice*, creating clearly defined initial rights should encourage rather than discourage subsequent negotiations.¹¹⁴ This is consistent with our determination in other proceedings that creating clearly defined initial operating rights reduces regulatory uncertainty, and so encourages investment.¹¹⁵ The commenters have not persuaded us to revisit this observation. We also

¹⁰⁸ SIA Comments at 14-15. *See also* SES Americom Reply at 9-10.

¹⁰⁹ SIA Comments at 16.

¹¹⁰ SIA Comments at 6-7, 16.

¹¹¹ Teledesic Comments at 23.

¹¹² Hughes Comments at 47-48; PanAmSat Reply at 3-4.

¹¹³ The Commission noted in the *Space Station Reform NPRM* that eliminating the anti-trafficking rule would encourage negotiations. *Space Station Reform NPRM*, 17 FCC Rcd at 3864 n.56.

¹¹⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3864 (para. 50), *citing, e.g.*, Coase, *The Problem of Social Cost*, 3 J.L. & Econ. 1 (1960) (Coase, *Social Cost*). In that article, Coase points out that, in the context of nuisance cases, "[i]t is necessary to know whether the damaging business is liable or not for damage caused since without the establishment of this initial delimitation of rights there can be no market transactions to transfer and recombine them." 3 J.L. & Econ. at 8. *See also* Coase, *The Federal Communications Commission*, 2 J.L. & Econ. 1, 25 (1959) (Coase, *FCC*) ("One of the purposes of the legal system is to establish that clear delimitation of rights on the basis of which the transfer and recombination of rights can take place through the market.")

¹¹⁵ The Commission has noted on several occasions that regulatory uncertainty can discourage investment, and so unnecessary regulatory uncertainty should be avoided. *See, e.g.*, Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Internet Over Cable Declaratory Ruling, Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable

believe that post-licensing negotiations will often be easier than pre-licensing negotiations, because in many cases only two parties will be involved in negotiations to transfer bandwidth rights from one party to the other. Unlike pre-licensing negotiations, it will not be necessary to have unanimous agreement in those cases. Therefore, a speculative applicant will not be able to delay its competitors through manipulation of post-licensing negotiations, as it could do in pre-licensing negotiations. In addition to finding that post-licensing negotiations should be easier than pre-licensing negotiations in many cases, we have no basis for assuming that the spectrum assignments resulting from post-licensing negotiations will be more or less efficient, or more or less likely to further the public interest, than the spectrum assignments resulting from pre-licensing negotiations. Moreover, we know of no reason to assume that the spectrum assignments resulting from pre-licensing negotiations are likely to be so superior to those resulting from post-licensing negotiations that even the 60-day delay of service to the public advocated by commenters is warranted.

46. We also disagree with commenters to the extent that they argue that the Commission cannot or should not issue any licenses until applicants have been given opportunities to determine and state their preferences, beyond the statements and preferences included in their applications. The Commission has found in other proceedings that applicants do not have an automatic right to a license.¹¹⁶ It follows that applicants do not have an automatic right to a license for a particular frequency band assignment, particularly when we adopt measures to facilitate post-licensing negotiations.

47. In sum, the procedures we adopt in this Order will enable us to issue licenses quickly, thereby clearly defining satellite licensees' rights and responsibilities, and facilitating later negotiations. Accordingly, there is no reason for continuing to rely on a much slower process in which satellite applicants must conduct negotiations before their rights and responsibilities are defined.

D. Details of Modified Processing Round Procedure

1. Overview of Framework

48. Under this procedure, we will continue to license NGSO-like satellite systems through processing rounds.¹¹⁷ Once a satellite application is filed, and we have determined that it

Facilities, *Declaratory Ruling and Notice of Proposed Rulemaking*, GN Docket No. 00-185, CS Docket No. 02-52, 17 FCC Rcd 4798, 4802 (para. 5) (2002); *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*; *Universal Service Obligations of Broadband Providers*; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services*; *1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*; *Notice of Proposed Rulemaking*, CC Docket Nos. 02-33, 95-20, 98-10, 17 FCC Rcd 3019, 3022-23 (para. 5) (2002); *Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services*, *Second Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 1411, 1421 (para. 25) (1994). *See also Kirby Corp. v. Pena*, 109 F.3d 258, 266-67 (5th Cir., 1997); *Houston Lighting and Power Co. v. United States*, 606 F.2d 1131, 1145 (D.C. Cir., 1979); *Chemical Bank New York Trust Co. v. S.S. Westhampton*, 358 F.2d 574, 580 (4th Cir. 1965).

¹¹⁶ *TelQuest Ventures, L.L.C., Memorandum Opinion and Order*, 16 FCC Rcd 15026, 15038-39 (para. 34) (2001), *citing* *National Broadcasting Co., Inc. v. United States*, 319 U.S. 190, 227 (1943).

¹¹⁷ We describe the procedure for feeder link applications in Section VI.E.1.f. below.

is acceptable for filing, we will put it on public notice, and announce a cut-off date for applications to be considered concurrently. We will review applications filed by the cut-off date to determine whether they are acceptable for filing, and if so, we will place those applications on public notice.¹¹⁸ Once the record has closed on all the applications placed on public notice, we will act on the applications. If there is not enough spectrum to accommodate all qualified applicants, we will divide the spectrum equally among those applicants. Each licensee will be allowed to choose its specific band assignment between 30 and 60 days before it launches its first satellite, by filing a letter with the Commission and serving the other participants in the processing round.¹¹⁹

49. In cases where there is no international frequency allocation, we will dismiss applications for NGSO-like satellite systems without prejudice as premature. In the past, the Commission has accepted applications before needed international frequency allocations were adopted to bolster its position at an international allocation conference, although such applications are not necessary for the United States to develop its position at such conferences. In any event, a petition for rulemaking to amend the domestic Table of Frequency Allocations¹²⁰ can also provide support for an international frequency allocation.

50. Once there is an international frequency allocation, we will accept and consider satellite applications. For applications filed before a domestic allocation is adopted, the applicant must request a waiver of the domestic Table of Frequency Allocations.¹²¹ We will consider these requests on a case-by-case basis to determine whether the waiver should be granted or denied, or whether other licensing options, including but not limited to auctions, consistent with our statutory authority, should be pursued. Further, until the Commission adopts a domestic allocation, operations must be on a non-conforming, non-interference basis with respect to allocated services. We will also include a condition in each license that requires the licensee to meet any rules that may be adopted for the service, either together with or after a domestic allocation is made.¹²²

51. We will also consider applications after we adopt a domestic frequency allocation, but before we have adopted frequency-band-specific service rules. We agree with Teledesic that

¹¹⁸ In the event that only one or two applicants file applications in the processing round, we will consider initiating a second processing round pursuant to the procedure discussed in Section V.D.4. below.

¹¹⁹ Allowing licensees to select their frequency band segment at the time they launch their first satellite is consistent with the *2 GHz Order*. *2 GHz Order*, 15 FCC Rcd at 16139 (para. 19). Also consistent with the *2 GHz Order*, licensees will be permitted to operate outside their band segment on a secondary basis. *2 GHz Order*, 15 FCC Rcd at 16139 (para. 19).

¹²⁰ 47 C.F.R. § 2.106.

¹²¹ 47 C.F.R. § 2.106.

¹²² If the international allocation is appropriate to countries or Regions not including the United States, these satellites will only be able to be authorized to provide service in these internationally allocated bands to those countries, and not the United States. If the Commission has made a determination not to implement an international allocation, that band will also not be authorized for service to and from the United States.

frequency-band-specific service rules may not be needed in all cases.¹²³ In addition, SIA is also correct that the Commission based its service rules for 2 GHz licenses on the service rules for the Big LEO satellite service, and that therefore it should be possible to craft generic service rules based on frequency-band-specific service rules that the Commission has adopted in the past.¹²⁴ Intelsat also supports adoption of generic or default service rules, although it does not suggest any such rules.¹²⁵ For the reasons discussed below, we adopt Teledesic's proposal, and adopt default service rules to govern satellite operations in frequency bands unless and until the Commission adopts frequency-band-specific service rules.

52. We generally base service rules for new satellite services on our existing rules governing similar services. Thus, we based our service rules for 2 GHz NGSO mobile-satellite service systems on rules for Big LEO NGSO mobile-satellite service systems. Given this, we see no reason to delay licensing satellite systems allocated for but not being used for satellite operations pending establishment of service rules. Rather, as the commenters suggest, we will license systems based on default rules and subject to any subsequent service rules for specific satellite operations in that band. Specifically, we will use the Part 25 technical requirements specified in Appendix C as default service rules for NGSO-like satellite systems.¹²⁶ We also require licensees to comply with any applicable ITU technical requirements.¹²⁷ Furthermore, licensees will be required to comply with any service-band-specific service rules that the Commission may adopt in that frequency band.

53. Also, as part of our default service rules, applicants must submit a narrative statement describing the design and operational strategies that they will use to mitigate orbital debris, as well as a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the spacecraft. We have consistently adopted, or proposed to adopt, this requirement in recent years in connection with a number of new services.¹²⁸ Furthermore, last

¹²³ Teledesic Comments at 20-22.

¹²⁴ SIA Comments at 13-14, *citing* The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, *Notice of Proposed Rulemaking*, IB Docket No. 99-81, 14 FCC Rcd 4843, 4846 (para. 3) (1999) (*2 GHz NPRM*) (proposing using big LEO service rules as a "starting point" for another service for the 2 GHz band).

¹²⁵ Intelsat Comments at 9.

¹²⁶ We adopt default service rules for GSO-like satellite systems in Section VI.E.1.d. below.

¹²⁷ Of course, we will continue to require all earth stations operating in frequency bands that are shared on a co-primary basis between satellite and other services, such as terrestrial wireless services, to coordinate their operations in accordance with Section 25.203 before they are licensed, regardless of whether they plan to communicate with space stations operating under default service rules or frequency-band-specific service rules. 47 C.F.R. § 25.203. Similarly, non-government operations of earth stations in a frequency band that is shared by Government and Non-Government operations will be required to be coordinated through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee's (IRAC) Frequency Assignment Subcommittee (FAS) before awarding a license in these bands. *See* Amendment of Parts 2, 25, and 90 of the Commission's Rules to Allocate the 13.75-14.0 GHz Band to the Fixed-Satellite Service, *Report and Order*, ET Docket No. 96-20, 11 FCC Rcd 11951, 11960-61 (para. 20) (1996).

¹²⁸ *See 2 GHz Order*, 15 FCC Rcd at 16188 (paras. 135-38); The Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit, Fixed Satellite Service in the Ku-Band, *Report and Order and Further Notice of Proposed Rulemaking*, IB Docket No. 01-96, 17 FCC Rcd 7841, 7865-66

year we proposed to apply this requirement to all FCC-licensed systems in the *Orbital Debris Notice*.¹²⁹ Based on this precedent and on the record developed in response to the *Orbital Debris Notice*, we find that the public interest concerns that lead us to require satellite licensees in the past to disclose their orbital debris mitigation plans and that were discussed in the *Orbital Debris Notice* also support adopting this requirement for satellite systems to which these default rules will apply. In preparing such exhibits, applicants may find guidance in the U.S. Government Orbital Debris Mitigation Standard Practices and the debris mitigation guidelines adopted by the Inter-Agency Space Debris Coordination Committee (IADC).¹³⁰ We note that the *Orbital Debris Notice* sought comment on a broad range of issues in addition to the question of whether a requirement to disclose debris mitigation plans should be adopted. These questions, along with the question of whether additional systems should be subject to a routine disclosure requirement, will be addressed by subsequent Commission action.

54. Our adoption of default service rules is a logical outgrowth of the *Notice*. There, the Commission proposed a procedure for considering satellite applications filed before service rules are adopted,¹³¹ and it invited parties to recommend alternatives to this proposal, together with all the proposals in the *Notice*.¹³² In response, several commenters recommended the adoption of default service rules.¹³³ In addition, SIA recommended that the Commission base the default service rules on service rules that Commission has adopted for similar services in the past.¹³⁴ Furthermore, the Commission emphasized that one of its primary goals for this proceeding is to expedite the satellite licensing process,¹³⁵ and default service rules further that goal.¹³⁶ Thus, interested parties should have anticipated that the Commission might consider adopting proposals

(para. 81) (2002). *See also* Establishment of Policies and Service Rules for Non-Geostationary Satellite Orbit, Fixed Satellite Service in the Ka-Band, *Notice of Proposed Rulemaking*, IB Docket No. 02-19, 17 FCC Rcd 2807, 2821 (para. 43) (2002).

¹²⁹ Mitigation of Orbital Debris, *Notice of Proposed Rulemaking*, IB Docket No. 02-54, 17 FCC Rcd 5586 (2002) (*Orbital Debris Notice*).

¹³⁰ *Orbital Debris Notice*, 17 FCC Rcd at 5615-18 (App. A). *See also* Application Of Constellation Communications Holdings, Inc., *Order and Authorization*, 16 FCC Rcd 13724, 13731 (Int'l Bur. and Office of Eng. and Tech. 2001); Application of the Boeing Company, *Order and Authorization*, 16 FCC Rcd 13691, 13702 (Int'l Bur. 2001). A technical presentation concerning the IADC debris mitigation guidelines, made to the most recent meeting of the Scientific and Technical Subcommittee of the U.N. Committee on the Peaceful Uses of Outer Space, is available at www.unvienna.org. The guidelines themselves will reportedly be available electronically in the near future at www.iadc-online.org.

¹³¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 35).

¹³² *Space Station Reform NPRM*, 17 FCC Rcd at 3897 (para. 147).

¹³³ SIA Comments at 13-14; Teledesic Comments at 20-22; Intelsat Comments at 9.

¹³⁴ SIA Comments at 13-14.

¹³⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3849-50 (para. 3).

¹³⁶ SIA Comments at 13-14.

for default service rules.¹³⁷ Moreover, because these parties made their recommendations in their comments, interested parties had an opportunity to respond to the proposals in their replies.¹³⁸

55. In sum, our default service rules for NGSO-like satellite systems are consistent with requirements that we have imposed on satellite licenses in the past. These default service rules are reasonable, and they further the public interest by enabling licensees to proceed with their business plans more quickly than would be possible otherwise. Moreover, if the default service rules are not appropriate in a particular case, they will be superceded by any service-specific service rules that we may adopt subsequently. Thus, licensees will be required to comply with those subsequent service-specific service rules. Finally, we emphasize that, in cases where we find that frequency-band-specific service rules may be warranted, we will initiate a rulemaking proceeding to consider such rules within four to six months of that determination. For example, frequency-band-specific service rules may be particularly appropriate in cases in which the band is shared between satellite service and other services.

2. Interrelation with Procedures for GSO-Like Satellite Systems

56. Because we stated above that we are adopting one licensing procedure for NGSO-like satellite system applications and another for GSO-like satellite system applications,¹³⁹ we will process both types of satellite system applications in a single queue in the order that they are filed. We will consider GSO-like satellite system applications, one at a time in the order they are filed. When an NGSO-like satellite system application reaches the front of the queue, we will conduct a processing round based on the modified processing round procedure we adopted above.

57. In cases where an applicant files an application for a satellite system that includes both categories of satellites, and we have established service rules for sharing between GSO and NGSO satellite systems, we will treat that application as two separate applications. We will consider the GSO-like request under the first-come, first-served procedure, and the NGSO-like request under the modified processing round procedure we adopt today.

58. On a going-forward basis, in cases where there are no service rules establishing criteria for sharing between GSO and NGSO satellite systems in a particular frequency band, we will consider only applications of the kind that is filed first. That is, if an NGSO-like satellite system application is filed first, we will conduct a processing round pursuant to the modified processing round procedure, and we will dismiss subsequently-filed GSO-like satellite system applications in that band until sharing criteria are established. Similarly, if a GSO-like satellite system application is filed first, we will consider other GSO-like satellite system applications in the order they are filed, and we will dismiss subsequently-filed NGSO-like satellite system applications in that band until sharing criteria are established. This is consistent with our current practice. For example, in the Ku-band, we initially considered only GSO satellite applications

¹³⁷ The concept of "logical outgrowth" includes proposals that parties should have anticipated might be imposed. *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 548-49 (D.C. Cir., 1983).

¹³⁸ *See also* *American Iron and Steel Institute v. EPA*, 115 F.3d 979, 988 (D.C. Cir., 1997) (statute directing agency to issue "guidance" for state water quality criteria also authorized agency to adopt default rules applicable to States that did not adopt standards, policies, and procedures consistent with the guidance).

¹³⁹ Section IV.B. above.

because the first applications for licenses in that band were for GSO systems.¹⁴⁰ We did not begin considering Ku-band NGSO applications until we had established sharing criteria for compatible services with GSO applicants in that band.¹⁴¹ In cases in which an applicant proposes a hybrid GSO-like/NGSO-like satellite system in a frequency band before we adopt sharing criteria for that band, we will treat the proposed satellite system as an NGSO-like system, with the GSO portion of the system as additional satellites in the constellation. This is consistent with the Commission's actions in the *2 GHz Order*. Finally, in the event that one or more GSO-like satellite system applications and one or more NGSO-like satellite system applications are filed at the same time, we will initiate a processing round, and divide the frequency band equally among all the qualified applicants. We will designate part of the band for GSO-like satellites and the rest of the band for NGSO-like satellite systems, based on the proportion of qualified GSO-like applicants to qualified NGSO-like applicants.

3. Amendments and Modifications

59. In the *Notice*, the Commission invited comment on revising the amendment and modification procedures.¹⁴² We find here that neither our amendment procedure nor our modification procedure require any revision as a result of our decision to modify the processing round procedure for NGSO-like satellite system applications. In contrast, we discuss below revisions to the amendment and modification procedures to be adopted in conjunction with the first-come, first-served procedure.¹⁴³

4. Additional Processing Rounds

60. Teledesic criticizes the Commission for not explaining in the *Notice* how this approach would apply to second processing rounds.¹⁴⁴ We explain here the procedure we will use for second and additional processing rounds. This procedure is a logical outgrowth of the procedure we proposed in the *Notice*.¹⁴⁵

¹⁴⁰ See Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, *Memorandum Opinion and Order*, 94 FCC 2d 129 (1983); Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, *Memorandum Opinion and Order*, 3 FCC Rcd 6972 (1988); Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, *Order and Authorizations*, 11 FCC Rcd 13788 (Int'l Bur. 1996).

¹⁴¹ Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range, *First Report and Order and Further Notice of Proposed Rulemaking*, ET Docket No. 98-206, 16 FCC Rcd 4096 (2000).

¹⁴² *Space Station Reform NPRM*, 17 FCC Rcd at 3866-67 (paras. 55-58). By definition, the term "amendment" refers to changes to an application before a license is issued, and the term "modification" refers to changes to a license after it is issued. 47 C.F.R. § 25.116 (amendments); 47 C.F.R. § 25.117(d) (space station license modifications). The *Notice* did not propose revisions to the definitions of "amendment" or "modification," but rather invited comment on revising the treatment of amendments or modifications in a first-come, first-served framework.

¹⁴³ Sections VI.E.3. and VI.E.4. below. We discuss transfer of control applications for both GSO-like and NGSO-like applications in Section VII.D. below.

¹⁴⁴ Teledesic Comments at 33.

¹⁴⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3863-64 (paras. 46-48), 3873-74 (para. 78).

61. As an initial matter, we do not anticipate conducting many second or additional processing rounds, because operating rights in all the available spectrum in the frequency band will be assigned equally to all qualified applicants in the first processing round, assuming that the applicants' spectrum requirements exceed the available allocation. In addition, the Commission invited comment on redistributing a licensee's spectrum rights to the licensee or licensees remaining in operation, in the event that a license is cancelled or relinquished.¹⁴⁶ The Commission argued that this would likely put the spectrum into use more quickly than any other alternative.¹⁴⁷ We hereby adopt this proposal in a slightly modified form. If a licensee loses or terminates its license, we will probably reassign the spectrum assigned to that licensee equally among the remaining licensees, assuming that there are a sufficient number of licensees remaining to make reasonably efficient use of the frequency band, and assuming that there is no basis at that time for considering reallocation of the spectrum. For reasons discussed below, we presume that a "sufficient number of licensees" for this purpose is three or more. By "reasonably efficient use of the frequency band," we mean that the remaining satellite licensees have not been assigned more spectrum than they need to meet their current and reasonably anticipated future customer needs.

62. Under this procedure, if one of those three licensees were to lose its license, the two remaining licensees would keep their spectrum assignments, and we could reassign the newly available spectrum to a new applicant or applicants pursuant to the applicable processing procedure. The existing licensees would not be allowed to apply for another license. This procedure represents a reasonable balance between quickly bringing spectrum into use and promoting multiple service providers in each frequency band.¹⁴⁸ Of course, the Commission always has the option to consider initiating a rulemaking proceeding to determine whether the available spectrum should be reallocated.

63. We will also apply this procedure to initial processing rounds in cases in which fewer than three qualified applicants file applications. In those cases, we will license each qualified applicant to operate in 1/3 of the available spectrum, and initiate a second processing round for the remaining spectrum. If there are fewer than a total of three licensees after the completion of the second processing round, we will determine at that time whether to keep that spectrum available for possible future applicants, or consider reallocation of the unlicensed spectrum.

64. We base this presumption that three is a sufficient number of remaining licensees on the Commission's reasoning in the *EchoStar-DirecTV Hearing Designation Order*, in which the Commission observed that courts have generally condemned mergers that would result in duopoly, particularly in cases where additional market entry would be difficult.¹⁴⁹ The Commission explained further that, in cases where the merger is likely to result in a significant

¹⁴⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3864 (para. 48).

¹⁴⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3864 (para. 48).

¹⁴⁸ We noted our concerns about promoting multiple service providers in the *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 36).

¹⁴⁹ Application of EchoStar Communications Corporation, General Motors Corporation and Hughes Electronics Corporation, *Hearing Designation Order*, CS Docket No. 01-348, 17 FCC Rcd 20559, 20604-05 (paras. 99-103) (2002) (*EchoStar-DirecTV Hearing Designation Order*), citing, e.g., *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 717 (D.C. Cir. 2001); *FTC v. Staples*, 970 F. Supp. 1066, 1081 (D.D.C. 1997).

reduction in the number of competitors and a substantial increase in concentration, antitrust authorities generally require the parties to demonstrate that there exist countervailing, extraordinarily large, cognizable, and non-speculative efficiencies that are likely to result from the merger.¹⁵⁰ Here, we find that the factors that have led courts to disfavor mergers to duopoly also support establishing a procedure that will maintain at least three competitors in a frequency band, unless an interested party can rebut our presumption that three is necessary to maintain a competitive market. To rebut this presumption, a party must provide convincing evidence that allowing only two licensees in the frequency band will result in extraordinarily large, cognizable, and non-speculative efficiencies.¹⁵¹ We also reserve the authority to initiate a second processing round or spectrum reallocation rulemaking proceeding as circumstances warrant when there are more than three licensees remaining in operation in cases where it can be shown that our presumption is incorrect that three licensees would not make reasonably efficient use of the frequency band.¹⁵²

65. This procedure for reassigning spectrum among the remaining NGSO-like licensees in a processing round, and the presumption of initiating a new processing round when there are fewer than three licensees, are logical outgrowths of our proposals in the *Notice*. The focus of the "logical outgrowth" test is whether parties should have anticipated that such a requirement might be imposed.¹⁵³ The Commission explicitly invited comment on redistributing spectrum initially licensed in a modified processing round among the remaining licensees.¹⁵⁴ The Commission also noted its concerns about promoting multiple service providers in the *Notice*.¹⁵⁵ Thus, parties should have anticipated that we would adopt rules to redistribute spectrum in this manner, and to allow new licensees an opportunity to apply for licenses when the number of licensees in a frequency band is less than a certain amount. Furthermore, even if this were not a logical

¹⁵⁰ *EchoStar-DirecTV Hearing Designation Order*, 17 FCC Rcd at 20604-05 (para. 102).

¹⁵¹ In some cases in the past, prior to the Commission's adoption of the *EchoStar-DirecTV Hearing Designation Order*, the Commission has allowed only two licensees in a market. See *An Inquiry Into the Use of the Bands 825-845 MHz and 870-890 for Cellular Communications Systems*; and *Amendment of Parts 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems, Report and Order*, CC Docket No. 79-318, 86 FCC 2d 469, 478-79 (para. 19) (1981); *Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, Report and Order*, WT Docket No. 02-8, 17 FCC Rcd 9980, 9993 (para. 23) (2002).

¹⁵² PanAmSat argues that the Commission could expedite processing rounds by starting a second processing round before completing the first round. PanAmSat Comments at 10. We disagree. The licenses that could be issued in a second processing round are dependent on the licenses issued in the first round. Thus, conducting two processing rounds simultaneously would needlessly complicate the second round. In any case, under our new procedure, there will be little need to have a second processing round, and so we need not determine the timing of those proceedings at this time.

¹⁵³ *Aeronautical Radio, Inc., v. FCC*, 928 F.2d 428, 445-46 (D.C. Cir. 1991); *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 549 (D.C. Cir. 1983).

¹⁵⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3864 (para. 48).

¹⁵⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 36).

outgrowth, Courts have explained that the Commission has broad discretion to manage its proceedings as we have done here.¹⁵⁶

5. Revision of Pleading Cycles

66. *Background.* In the *Notice*, we invited comment on whether the pleading cycle for petitions to deny, oppositions, and replies to a lead application should run concurrently with the pleading cycle for competing applications. In other words, after mutually exclusive applications are filed in response to a cut-off date announcement, petitions to deny, oppositions, and replies would be filed in response to all applications, including the lead application, under the same pleading cycle.¹⁵⁷

67. *Discussion.* SIA suggests placing all applications in a processing round on identical pleading cycles.¹⁵⁸ We will not adopt this suggestion because it could cause a further delay in processing applications in a processing round. Under our current practice, we can start our review of the lead application to determine the applicant's qualifications while we wait for the record to close on the other applications in the processing round. If we postponed the pleading cycle for the lead application to run concurrently with other applications, we would lose that opportunity. As a result, our review of the lead application would be delayed somewhat, and thus action on all the applications in the processing round would also be delayed. Moreover, in cases where no competing applications are filed, the pleading cycle for the lead application would be delayed by 30 days unnecessarily, which in turn would delay licensing and service to the public.

E. Other Proposals for Modifying Processing Rounds

68. Some commenters propose other modifications to the processing round procedure. For example, SIA contends that, in 1998, the International Bureau (Bureau) adopted a goal of placing satellite applications on public notice within 10 days, and recommends renewing its efforts towards that goal.¹⁵⁹ While the Bureau strives to place applications on public notice as quickly as possible, and will continue to do so in the future, this 10-day goal applies to routine earth station applications only.¹⁶⁰ Space station applications are more complex than routine earth

¹⁵⁶ See *Telecommunications Resellers Association v. FCC*, 141 F.3d 1193, 1196 (D.C. Cir., 1998), *citing* *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *GTE Service Corp. v. FCC*, 782 F.2d 263, 273-74 (D.C. Cir., 1986).

¹⁵⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3873 (para. 77).

¹⁵⁸ SIA Comments at 13.

¹⁵⁹ SIA Comments at 12-13, *citing* International Bureau to Streamline Satellite and Earth Station Processing, *Public Notice*, Report No. SPB-140 (released Oct. 28, 1998). See also Hughes Comments at 46-47.

¹⁶⁰ See International Bureau to Streamline Satellite and Earth Station Processing, *Public Notice*, Report No. SPB-140 (released Oct. 28, 1998). The public notice states that the Bureau will place "routine applications" on public notice within 10 business days of receipt. The Commission does not distinguish between routine and non-routine space station applications. These categories apply only to earth station applications. See 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network

station applications, and it will be difficult to determine whether a space station application is complete and acceptable for filing given that the Commission does not currently have a uniform format for such applications.¹⁶¹ In addition, placing applications on public notice has not been a major source of delay in most processing round proceedings in the past,¹⁶² and so we do not see a need for a formal requirement at this time.

69. PanAmSat recommends establishing a deadline of one year for the Commission to complete processing rounds.¹⁶³ We anticipate that the processing round procedure we adopt today will take less than a year to complete, and so PanAmSat's proposed deadline appears unnecessary at this time.

70. Finally, SIA observes that a number of potential sources of delay in issuing satellite licenses, such as coordination with other Federal Government agencies, and the international spectrum allocation process, are outside the Commission's control, and recommends focusing on sources of delay within its control.¹⁶⁴ We agree with SIA. Accordingly, the Commission focused on sources of delay within its control in the *Notice*. The Commission directed its attention on procedures for processing satellite applications in the *Notice* when an allocation and service rules are available.¹⁶⁵ Moreover, we note that we have adopted procedures in this Order to dismiss satellite applications before an international frequency allocation is adopted, and that enable us to consider satellite applications before we adopt service-band specific service rules.¹⁶⁶ Therefore, we expect frequency band allocation and service rule proceedings to cause less licensing delay than they have in the past. Finally, in the *Notice*, the Commission also recognized that interagency coordination can also delay processing of some satellite applications.¹⁶⁷ In the past, we have worked together with other Federal Government agencies to find ways to facilitate interagency coordination,¹⁶⁸ and we will continue to do so in the future. In the meantime, however, SIA's discussion of sources of potential licensing delay outside our control does not dissuade us from addressing the sources of potential licensing delay within our control. We

Earth Stations and Space Stations, *Notice of Proposed Rulemaking*, IB Docket No. 00-248, 15 FCC Rcd 25128, 25132 (para. 7) (2000) (*Part 25 Earth Station Streamlining NPRM*).

¹⁶¹ 47 C.F.R. § 25.114(b). The Commission has decided to adopt a uniform format for space station applications, to be called "Schedule S." *Space Station Reform NPRM*, 17 FCC Rcd at 3877 (para. 88). We are currently considering comments regarding the details of Schedule S, and we will address those issues in a future Order.

¹⁶² Generally, we have delayed placing satellite applications on public notice only in cases in which a needed domestic or international frequency allocation has not been adopted.

¹⁶³ PanAmSat Comments at 10.

¹⁶⁴ SIA Comments at 9-11.

¹⁶⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3856 (para. 25).

¹⁶⁶ Section V.D.1. above.

¹⁶⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3851 (para. 8).

¹⁶⁸ See FCC and NTIA Sign New Memorandum of Understanding on Spectrum Coordination, *Press Release* (released Jan. 31, 2003).

believe that those specific issues need to be addressed during the development of multilateral procedures to facilitate interagency coordination.

VI. FIRST-COME, FIRST-SERVED PROCEDURE FOR GSO-LIKE SATELLITE SYSTEMS

A. Background

71. In the *Notice*, the Commission also invited comment on a first-come, first-served processing approach, based in large part on the procedure used for FM radio and television licenses from 1985 to 1998.¹⁶⁹ Under this approach, in cases where frequencies have been allocated for the proposed service, and we have adopted service rules, we would issue a public notice inviting comment on the first application filed.¹⁷⁰ Subsequently filed mutually exclusive applications would be included in a queue according to their date of filing.¹⁷¹ If for any reason we could not grant the lead application, we would dismiss it and begin consideration of the next application in the queue and continue this process until we could grant an application.¹⁷² After we issue a license, we would keep the subsequently filed applications on file for the specific GSO orbit location and frequency band. If the licensee loses its license at any time before it begins operation, for failure to meet a milestone or for any other reason, the next application in the queue would be considered. If and when the licensee places its satellite or any of its satellites in a constellation in operation, we proposed returning the later-filed applications to those applicants.¹⁷³

72. In cases where frequencies have not been allocated for the proposed service, or the Commission has not adopted service rules, the Commission proposed placing the lead application and subsequently filed applications in a queue. The applications would remain pending until the frequency allocation and service rule proceedings are complete. At that time, under the Commission's proposal in the *Notice*, it would consider the pending applications under the first-come, first served approach. Specifically, it would process those applications one at a time, in the order that they have been placed in the queue, until it grants an application.¹⁷⁴

73. For reasons discussed in Section VI.B. below, we conclude that the first-come, first-served procedure is the best option available for GSO-like satellite systems, *i.e.*, satellite systems where the earth station antennas accessing the satellites in that system can exclude transmissions from satellites other than the one at which it is directly pointed. In Section VI.C., we explain why a modified processing round approach is not well suited to GSO-like satellite systems. In Section

¹⁶⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3857 (para. 26). *See also* Amendment of the Rules Concerning Cut-Off Procedures for FM and TV Broadcast Stations, *Report and Order*, MM Docket No. 84-750, FCC 85-125, 50 Fed. Reg. 19936, 19941-42 (paras. 33-36) (May 13, 1985) (*TV and FM Broadcast Order*), *recon. denied*, 50 Fed. Reg. 43157 (Oct. 24, 1985), *aff'd without published opinion sub nom.* Hilding v. FCC, 835 F.2d 1435 (9th Cir. 1987), *reprinted at* 58 Rad. Reg. 2d 776 (1985).

¹⁷⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 33).

¹⁷¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 33).

¹⁷² *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 33).

¹⁷³ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34).

¹⁷⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (paras. 35-37).

VI.D., we consider and reject several arguments raised in opposition to the first-come, first-served procedure. In Section VI.E., we describe in detail the first-come, first-served procedure we adopt in this Order, including slight variations from the proposals in the *Notice* based on the record in this proceeding. In Section VI.F., we consider Intelsat's modified first-come, first-served proposal. Finally, Section VI.G. addresses the proposal in the *Notice* to eliminate the fungibility policy.

B. Benefits of First-Come, First-Served Procedure

74. We find that the first-come, first-served procedure will enable us to act on satellite applications dramatically more quickly and efficiently than under the current processing round procedure. Thus, consumers will benefit because they will receive service faster. In addition, our procedure will lead to more efficient spectrum usage because it will reduce the amount of time spectrum lies fallow. Furthermore, a faster licensing procedure would enable U.S. satellite operators to comply with ITU bringing-into-use requirements more easily, and so help preserve U.S. leadership in the satellite industry. Moreover, we expect that the first-come, first-served procedure will be faster than the modified processing round procedure we adopt in this Order above. Accordingly, it would further the public interest to adopt a first-come, first-served procedure for as many types of satellite licenses as possible, except NGSO-like applications, for which licensing the first applicant to operate in a certain frequency band would prevent other applicants from using that spectrum.¹⁷⁵

75. Some commenters question whether the first-come, first-served procedure will expedite licensing. For example, Hughes and PanAmSat argue that delays in licensing are often not the result of processing rounds, but rather spectrum allocation or service rule proceedings.¹⁷⁶ Although we agree that spectrum allocation or service rule proceedings can increase the time needed to issue satellite licenses, Hughes and PanAmSat are mistaken in asserting that the use of processing rounds under our current procedure does not also cause delay. Even in cases where we did not have to obtain an international allocation or adopt service rules, such as the second processing round for GSO Ka-band satellite systems, it often takes several years from filing date to licensing.¹⁷⁷ We also note that the procedures we adopt here will enable us to act on satellite applications before we adopt specific service rules,¹⁷⁸ which will further expedite licensing procedures.

76. Boeing and Hughes also question whether the procedure proposed in the *Notice* would expedite licensing because of our proposal to facilitate competition by setting spectrum limits in service rule proceedings.¹⁷⁹ These parties maintain that determining spectrum limits in rulemaking proceedings would force those proceedings to take on all the characteristics of processing rounds, and so would not reduce the time needed to issue licenses.¹⁸⁰ We do not

¹⁷⁵ Section V.B.

¹⁷⁶ Hughes Comments at 3-4, 5-8, 33; PanAmSat Comments at 9.

¹⁷⁷ See *Space Station Reform NPRM*, 17 FCC Rcd at 3871-72 (para. 68) (citing second Ka-band processing round).

¹⁷⁸ Section V.D.1. above.

¹⁷⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 36).

¹⁸⁰ Boeing Comments at 7-8; Hughes Comments at 34.

intend to use rulemaking proceedings to determine spectrum limits. Rather, because competitive GSO-like satellite systems can operate in the same spectrum, we intend to assign qualified applicants to their requested spectrum, subject to additional limits to prevent speculation and warehousing. We conclude that this adequately addresses Boeing's and Hughes's concern.

C. Opportunities for Competitive Entry for GSO-Like Satellite Systems

77. *Background.* In this Section, we explain why the procedure we adopted for NGSO-like satellite system applications is not well suited for GSO-like satellite system applications. We also conclude that the issue that persuaded us that a first-come, first-served procedure is not appropriate for NGSO-like satellite system applications -- the possibility of unreasonably limiting additional market entry -- is more easily addressed in the context of GSO-like satellite system applications.

78. *Discussion.* PanAmSat claims that a band segmentation approach for GSO FSS satellite applications would limit satellite operators to a fraction of the frequencies in the band, and would not allow them to develop a viable business.¹⁸¹ PanAmSat raises a good point. Unlike the case of NGSO-like satellite systems,¹⁸² splitting spectrum at a single orbit location among several processing round participants would not give any of the applicants adequate spectrum in many cases, particularly when there are many participants in the processing round.¹⁸³ Furthermore, an applicant would require several transactions to acquire the spectrum needed for a viable service, and completing all those transactions would necessarily take a great deal of time. Accordingly, we conclude that the first-come, first-served procedure is better-suited for GSO-like satellite systems than the modified processing round approach.¹⁸⁴

79. We also find here that the concerns that lead us to reject the first-come, first-served procedure for NGSO-like satellite systems do not apply to GSO-like satellite systems. We observed above that several parties criticized our proposal for preventing a lead applicant from applying for an excessive amount of spectrum in a first-come, first-served procedure, and thereby

¹⁸¹ PanAmSat Comments at 13.

¹⁸² Section V.C.1.

¹⁸³ For example, there were 13 participants in the first Ka-band processing round. *See* Assignments of Orbital Locations to Space Stations in the Ka-band, *Order*, 11 FCC Rcd 13737 (Int'l Bur. 1996).

¹⁸⁴ Although we find that the band-splitting approach in the modified processing round procedure is not well suited to GSO-like satellite system applications, we adopt this approach for resolving mutually exclusive situations among two or more GSO-like applications filed at the same millisecond. Section VI.E.2. This is because a significant factor weighing against the modified processing round procedure for GSO-like satellite system applications are less of a concern when we use this approach as a second-tier selection mechanism in a first-come, first-served procedure. Specifically, splitting the band equally among multiple applicants for a single GSO orbit location in a modified processing round, applicants may need to engage in several transactions to acquire enough bandwidth for a viable service. On the other hand, applying the band-splitting approach to GSO-like satellite systems only as a second-tier selection mechanism should mean that we use this procedure for that kind of application very rarely, and in those cases, the bandwidth should be divided equally between only two applicants. Thus, if a licensee is authorized to operate with what it considers to be an insufficient amount of bandwidth, it should need only one transaction to obtain the bandwidth it desires.

preclude additional market entry.¹⁸⁵ We also concluded above that we cannot adopt a first-come, first-served procedure for NGSO-like satellite system applications because it would either allow an applicant to request so much spectrum as to preclude additional entry, or require us to determine the amount of spectrum needed to provide a service in a processing round.¹⁸⁶ These concerns do not apply to GSO-like satellite applications because assigning a frequency band segment to one licensee at one orbit location does not preclude other licensees from using the same frequency band segments at other orbit locations, or to use other frequency band segments at the same orbit location. Moreover, we adopt additional safeguards in this Order below. First, we limit the number of pending applications each applicant may have in any frequency band.¹⁸⁷ Second, we adopt default service rules for GSO-like satellite system applications based on our two-degree-spacing policy, to facilitate additional entry into the market.¹⁸⁸

D. General Comments

1. Introduction

80. Several parties opposed the proposed first-come, first-served procedure. With respect to GSO-like satellite systems, however, those parties do not raise persuasive reasons for rejecting this proposal. We explain our conclusion in detail below.

2. Spectrum Efficiency

81. *Background.* Several parties contend that processing rounds facilitate the development of efficient spectrum sharing plans and methods to accommodate more satellites.¹⁸⁹ Teledesic counters that the first-come, first-served approach encourages later applicants to develop methods to share with existing licensees.¹⁹⁰

82. *Discussion.* As an initial matter, we will use our two-degree-spacing standards for GSO-like satellites in new frequency bands, in the absence of frequency band-specific service rules.¹⁹¹ The Commission has explained how its two-degree spacing requirements have lead to efficient use of the C-band and Ku-band.¹⁹² Nothing in the first-come, first-served procedure will

¹⁸⁵ Section V.B., *citing* Boeing Comments at 7-8; Hughes Comments at 34; SES Americom Comments at 6-7; Telesat Comments at 3.

¹⁸⁶ Section V.B.

¹⁸⁷ Section VII.E.

¹⁸⁸ Section VI.E.1.d.

¹⁸⁹ SIA Comments at 6-8; SES Americom Comments at 7; Final Analysis Comments at 2-3; Boeing Comments at 5; PanAmSat Reply at 2-3; Orbcomm Reply at 2-3.

¹⁹⁰ Teledesic Reply at 25.

¹⁹¹ Section VI.E.1.d.

¹⁹² Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, *Report and Order*, CC Docket No. 81-704, FCC 83-184, 54 Rad. Reg. 2d 577 (released Aug. 16, 1983); Licensing Space Stations in the Domestic Fixed-Satellite

affect the Commission's technical requirements for satellites. Further, by enabling us to issue licenses more quickly, the first-come, first-served approach will lead to more efficient spectrum use than is now possible under our current procedure, by reducing the amount of time spectrum lies fallow.

83. Moreover, assuming for the sake of argument that the current processing round procedure does result in more efficient spectrum use than the first-come, first-served procedure we adopt here, we would still conclude that the first-come, first-served procedure furthers the public interest more effectively than the current procedure. We believe that any marginal increase in public interest benefit that could result from the current processing round procedure would be outweighed by the additional months or years that the current procedure delays service to the public.

3. Speculative Applications

84. *Background.* PanAmSat and Boeing liken the first-come, first-serve proposal to the ITU notification procedure, and maintain that speculation is a serious problem in that procedure.¹⁹³ Several parties doubt that the Commission's proposals to limit speculative or frivolous applications in a first-come, first-served procedure are adequate.¹⁹⁴ SES Americom maintains that satellite applicants intending to construct their proposed systems need protection from speculative satellite applicants, particularly applicants proposing multiple-satellite systems.¹⁹⁵

85. In contrast, Teledesic argues that the first-come, first-served approach discourages speculation by enabling the Commission to act on all applications quickly,¹⁹⁶ and by substantially reducing the incentives to file applications as a "place holder" or to block a competitor's application.¹⁹⁷ Teledesic argues further that a queue would reduce the number of speculative applications by requiring applicants to perform interference studies and develop any needed sharing strategies before they file their applications.¹⁹⁸ SES Americom replies that applicants in a first-come, first-served approach have no incentive to develop sharing strategies with other applicants later in the queue.¹⁹⁹ SES Americom also contends that a first-come, first-served

Service, 48 F.R. 40233 (Sept. 6, 1983) (*Two Degree Spacing Order*) (two-degree spacing adopted to maximize the number of satellites in orbit).

¹⁹³ PanAmSat Comments at 7-8; Boeing Comments at 9.

¹⁹⁴ SIA Comments at 22-25; SES Americom Comments at 3; Final Analysis Comments at 3; Inmarsat Comments at 7-8; Boeing Comments at 5; Hughes Comments at 25-27; PanAmSat Comments at 5-6; Pegasus Comments at 2-3; SES Americom Reply at 4-5; PanAmSat Reply at 3; CTIA Comments at 4-5.

¹⁹⁵ SES Americom Comments at 4.

¹⁹⁶ Teledesic Comments at 27-28.

¹⁹⁷ Teledesic Reply at 18-19.

¹⁹⁸ Teledesic Comments at 9-10.

¹⁹⁹ SES Americom Reply at 6-7.

approach would discourage satellite operators from developing sharing strategies before they file their applications, because it could require an applicant to reveal its business plans to a competitor and enable that competitor to apply for that orbital location first.²⁰⁰

86. *Discussion.* Both Teledesic and other commenters are correct, in that both processing rounds and the first-come, first-served procedure create incentives for speculation. Thus, we disagree with parties who argue that a first-come, first-served procedure will necessarily increase the incentives for filing speculative satellite applications. In addition, although giving licensees flexibility to propose and implement new or innovative satellite systems will always create some potential for speculation, we adopt safeguards that should substantially reduce that potential. These safeguards include limiting the number of licensed but unbuilt satellite systems, adopting new milestones, including a bond-posting requirement, and strictly enforcing milestones.²⁰¹ Accordingly, we conclude that the mere possibility of some speculation in a first-come, first-served procedure does not by itself justify rejection of the first-come, first-served procedure for satellite applications.

4. Influx of Applications

87. *Background.* A number of parties assert that, if the Commission establishes a first-come, first-served licensing procedure, it would be difficult to address a large influx of satellite applications because those applications can be complex and the Commission would need to address multiple queues.²⁰² Teledesic argues that this problem could be resolved if the Commission considers all applications in the order they are filed, and create a single queue for all satellite applications, rather than establish a separate queue for each orbit location.²⁰³ Specifically, Teledesic denies the premise that applications will form themselves easily into identifiable groups of mutually exclusive applications for particular orbit locations.²⁰⁴ Rather than making the difficult determination of which application should be placed in which queue, Teledesic recommends creating a single queue, and granting all qualified applications for satellites that would not cause harmful interference to any previously licensed satellite.²⁰⁵

88. *Discussion.* We agree that a large influx of satellite applications could be problematic if it overwhelms our electronic filing system. We conclude, however, that this possibility does not justify rejecting the first-come, first-served procedure. First, any problem that occurs would occur only at the time the first-come, first-served rules take effect. Second, we hereby adopt measures to mitigate any problem that may occur. We adopt Teledesic's proposal in modified form, and will maintain one queue. We discuss this queue in detail below.²⁰⁶ Here, we

²⁰⁰ SES Americom Reply at 7.

²⁰¹ Sections VII.E.3, VII.C.

²⁰² SES Americom Comments at 9; PanAmSat Comments at 8; Boeing Comments at 8-10; SES Americom Reply at 4.

²⁰³ Teledesic Reply at 20-21.

²⁰⁴ Teledesic Reply at 20.

²⁰⁵ Teledesic Reply at 21.

²⁰⁶ Section VI.E.1.a.

conclude that eliminating the complexity caused by maintaining a separate queue for each orbit location sufficiently addresses the concern that the Commission might have difficulty with a large influx of applications.

89. Furthermore, we will adopt a freeze on all satellite applications, starting with the adoption of this Order, and ending on the date a summary of this Order is published in the Federal Register. This will give us additional time to ensure that our electronic filing system is sufficient for any influx of applications that may develop. Courts have recognized the Commission's authority to adopt application freezes.²⁰⁷ Moreover, freezes on application filing are procedural in nature and hence are not subject to the notice and comment requirements of the Administrative Procedure Act.²⁰⁸

90. Finally, the rule revisions in Appendix B will generally take effect upon publication in the Federal Register, rather than 30 days after publication. This is consistent with our actions when we adopted a first-come, first-served procedure with a one-day cut-off rule for the multipoint distribution service (MDS).²⁰⁹ In the *MDS Order*, we concluded that cut-off rule was a procedural rule that could take effect on less than 30 days notice.²¹⁰ We concluded further that preventing speculation constituted good cause to make the rule revisions take effect upon publication in the Federal Register.²¹¹

5. ITU Issues

91. *Background.* SIA and SES Americom assert that a first-come, first-served approach would limit the number of companies participating in the ITU spectrum allocation process, because a first-come, first-served approach would substantially reduce the number of applicants receiving licenses.²¹² Similarly, Boeing asserts that a first-come, first-served approach would

²⁰⁷ See, e.g., *Neighborhood TV Co. v. FCC*, 742 F.2d 629, 637-38 (D.C. Cir., 1984) and *Kessler v. FCC*, 326 F.2d 673, 680-82 (D.C. Cir., 1963).

²⁰⁸ Administrative Procedure Act, 5 U.S.C. § 553(b)(3)(B). The Commission has previously found that, in cases where it adopts a new licensing procedure, it may be necessary to adopt temporary licensing freezes to prevent applicants from using the old licensing procedures to engage in speculative activity prior to the effectiveness of the new rules. Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-87, 15 FCC Rcd 22709, 22737-38 (paras. 60-61) (2000).

²⁰⁹ Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting Private Operational-Fixed Microwave Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service, Gen. Docket Nos. 90-54 and 80-113, 5 FCC Rcd 6410, 6424 (para. 90) (1990) (*MDS Order*).

²¹⁰ *MDS Order*, 5 FCC Rcd at 6441 n.73.

²¹¹ *MDS Order*, 5 FCC Rcd at 6441 n.73.

²¹² SIA Comments at 8-9; SES Americom Comments at 6. See also Intelsat Comments at 10 (applying a version of a first-come, first-served approach to services without frequency allocations or service rules would place the burden of championing service rules or frequency allocations on one applicant).

limit the number of ITU submissions that the Commission could file.²¹³ Hughes and Boeing argue that the ITU submission for a lead applicant could limit the options of subsequent parties if the lead applicant fails by requiring the subsequent party to operate within the technical parameters of the first licensee's application.²¹⁴

92. *Discussion.* None of the parties' concerns regarding the ITU persuade us to reject the first-come, first-served procedure. First, SIA and SES Americom are mistaken in assuming that a first-come, first-served approach would substantially reduce the number of applicants receiving licenses relative to processing rounds. We will generally require GSO-like satellite systems to be two-degree-compliant, allowing us to license multiple satellites that will use the same spectrum. Therefore, it seems likely the same number of satellites will be licensed under a first-come, first-served procedure as would be in a processing round. Furthermore, because we expect to grant the same number of satellite applications, we disagree with Boeing that the first-come, first-served procedure will limit U.S. ITU submissions.

93. Finally, we do not agree with Hughes or Boeing that the ITU submission for a lead applicant could limit the options of subsequent parties if the lead applicant fails. Under the processing round procedure, if a license is revoked and the orbit location is reassigned, the new licensee is required to meet the specifications of the original ITU filing or file a new ITU filing, and assume any subsequent ITU costs associated with that filing.²¹⁵ This will not change under the first-come, first-served procedure we adopt today.

6. Uncertainty

94. A number of commenters maintain that any major revision of the satellite licensing procedure could cause uncertainty and could lead to litigation over the details of the new procedure.²¹⁶ Even if this is true, it does not justify keeping an inefficient processing system in place.

7. Non-U.S.-Licensed Satellites

95. *Background.* Inmarsat argues that the first-come, first-served approach does not adequately consider whether the lead applicant is requesting a license for an orbital location for which the United States has ITU priority, and so could unreasonably preclude some non-U.S. satellite operators from entering the U.S. market.²¹⁷

96. *Discussion.* As is the case now in processing rounds, U.S. licensees assigned to a particular orbit location in a first-come, first-served approach take their licenses subject to the outcome of the international coordination process. The Commission is not responsible for the outcome of any particular satellite coordination and does not guarantee the success or failure of

²¹³ Boeing Comments at 6.

²¹⁴ Hughes Comments at 32-33; Boeing Comments at 6-7.

²¹⁵ We do not require new licensees under these circumstances to reimburse the original licensee for ITU fees or any other fees, however.

²¹⁶ Hughes Comments at 23-24; Pegasus Comments at 3; PanAmSat Reply at 3.

²¹⁷ Inmarsat Comments at 4-7.

the required international coordination.²¹⁸ Moreover, we expect U.S. licensees to abide by international regulations when their systems are coordinated. This may mean that the U.S.-licensee may not be able to operate its system if the coordination cannot be appropriately completed. Indeed, with the first-come, first-served approach, we assign applicants to the orbit location that is requested. Consequently, the applicant assumed the coordination risk when choosing that particular orbit location at the time it submitted its application.

8. Disadvantage in Non-U.S. Markets

97. *Background.* Final Analysis contends that, if the Commission adopts a first-come, first-served approach, it might encourage other countries to adopt this approach. Final Analysis further speculates that some foreign Administrations might implement their first-come, first-served procedures in a way that gives an unfair advantage to their foreign government-controlled satellite operators.²¹⁹

98. *Discussion.* Even assuming that our actions in this Order might induce more countries to adopt a first-come, first-served procedure, there is no evidence that U.S. satellite operators would be disadvantaged. We note that several countries already use a first-come, first-served procedure, and no U.S. operators have claimed to be disadvantaged in those countries. Further, there are safeguards in place to discourage governments from favoring their own providers. Under the World Trade Organization (WTO) Basic Telecom Agreement, WTO signatories are required to treat service providers from other signatories no less favorably than their own service providers.²²⁰ This requirement applies to any WTO signatory adopting a first-come, first-served procedure for satellite licenses. Furthermore, we have procedures in place now that preclude operators of satellites licensed by non-WTO signatories from entering the U.S. market unless they can show that their licensing procedures do not distort competition by creating *de facto* or *de jure* barriers for U.S.-licensed satellite operators trying to enter that country's market.²²¹

9. Legal Analysis

a. Background

99. In the *Space Station Reform NPRM*, the Commission noted that the processing round process was developed in response to *Ashbacker*, a 1945 Supreme Court case.²²² In *Ashbacker*,

²¹⁸ Pegasus Development Corporation, Application for Authority to Construct, Launch, and Operate a Ka-Band Satellite System in the Fixed-Satellite Service, *Order and Authorization*, 16 FCC Rcd 14378, 14386 (para. 24) (Int'l Bur., 2001).

²¹⁹ Final Analysis Comments at 2.

²²⁰ See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, *Report and Order*, IB Docket No. 96-111, 12 FCC Rcd 24094, 24103 (para. 22) (1997) (*DISCO II*), and sources cited therein.

²²¹ *DISCO II*, 12 FCC Rcd at 24127-28 (paras. 72-73).

²²² *Space Station Reform NPRM*, 17 FCC Rcd at 3868-69 (para. 62), citing *Ashbacker v. FCC*, 326 U.S. 327 (1945) (*Ashbacker*).

the Court interpreted the hearing requirement in Section 309 of the Communications Act²²³ to require the Commission to consider two mutually exclusive applications, both of which had been accepted for filing, in a comparative hearing before granting one and denying the other.²²⁴ At the time the Commission adopted the current processing round procedure, in 1983, it interpreted *Ashbacker* as permitting a cut-off procedure to preserve the rights of all existing applicants and all potential future qualified space station license applicants with concrete proposals for satellite systems.²²⁵

100. As the Commission explained in the *Space Station Reform NPRM*, it subsequently recognized that the first-come, first-served procedure also meets the *Ashbacker* requirements.²²⁶ Specifically, the Commission observed that *Ashbacker* allows it to promulgate regulations limiting the filing rights of competing applicants, and leaves to the Commission's discretion the circumstances under which applications are considered mutually exclusive.²²⁷ The Commission also observed that the Supreme Court's discussion in *Storer* is consistent with our first-come, first-served proposal.²²⁸ In *Storer*, a broadcast license applicant argued that Section 309 required the Commission to consider its application even though granting the application would cause the applicant to exceed the Commission's limit on the number of broadcast stations that could be held by one party.²²⁹ The Court held that the hearing requirement in Section 309 does not require the Commission to consider applications that are inconsistent with its rules.²³⁰

101. Hughes and other parties question the legal analysis of a first-come, first-served procedure in the *Space Station Reform NPRM*. For the reasons set forth below, none of the parties have convinced us that our analysis is incorrect.

b. Consistency with Communications Act

102. *Background.* Hughes asserts that the first-come, first-served approach is inconsistent with the Communications Act, based on an assumption that the Commission's

²²³ 47 U.S.C. § 309.

²²⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3868-69 (para. 62), citing *Ashbacker*, 326 U.S. at 330-31.

²²⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3868-69 (para. 62), citing *1983 Cut-Off Order*, 93 FCC 2d at 1261 (para. 2).

²²⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3869 (para. 63), citing *TV and FM Broadcast Order*, 50 Fed. Reg. at 19938-39 (para. 16).

²²⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3869 (para. 63), citing *TV and FM Broadcast Order*, 50 Fed. Reg. at 19939 (para. 16), *Ashbacker*, 326 U.S. at 333 n.9; MCI Airsignal International, Inc., FCC 84-397 (released Aug. 17, 1984).

²²⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3869 (para. 64), citing *United States v. Storer Broadcasting Co.*, 351 U.S. 192 (1956) (*Storer*).

²²⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3869 (para. 64), citing *Storer*, 351 U.S. at 193.

²³⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3869 (para. 64), citing *Storer*, 351 U.S. at 202-04; *National Broadcasting Co. v. United States*, 319 U.S. 190, 230 (1943).

proposed procedure would result in issuing licenses without a public interest inquiry.²³¹ Hughes also cites court cases which it claims require the Commission to give parties an opportunity to file applications to be considered together with a lead application.²³² Teledesic and Intelsat question Hughes's legal analysis.²³³

103. *Discussion.* We agree with Teledesic's interpretation of *Ashbacker* and its progeny. In particular, as Teledesic points out, we have considered and rejected arguments that *Ashbacker* or the Communications Act requires the Commission to give parties an opportunity to file mutually exclusive applications.²³⁴ Moreover, we have not always issued satellite licenses pursuant to processing rounds. For example, we used a *de facto* first-come, first-served procedure, without processing rounds, for the first decade during which we accepted commercial satellite applications.²³⁵ We also considered separate system satellites outside of processing rounds until 1996, when we adopted a unified licensing framework for domestic and international satellites.²³⁶ Moreover, we consider replacement satellite applications outside of processing rounds.²³⁷ This practice includes applications for replacements of conventional C-band or Ku-band satellites seeking authority to operate in the extended C-band or extended Ku-band,

²³¹ Hughes Comments at 9-11, 20-21. *See also* SES Americom Reply at 5-6.

²³² Hughes Comments at 12-14, *citing* United States v. Storer Broadcasting Co., 351 U.S. 192 (1956), *Aeronautical Radio, Inc. v. FCC*, 928 F.2d 428 (D.C. Cir. 1991).

²³³ Teledesic Reply at 5-13, *citing, e.g., Ashbacker*, 326 U.S. at 333 n.9, *FCC v. Pottsville Broadcasting Co.*, 309 U.S. 134, 138 (1940) (*Pottsville Broadcasting*); Intelsat Comments at 12 n.28; Intelsat Reply at 3, *citing* 47 U.S.C. § 309(e), *Hispanic Information & Telecommunications Network v. FCC*, 865 F.2d 1289, 1294 (D.C. Cir. 1989).

²³⁴ Teledesic Reply at 13-15, *citing* Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing the Use of Frequencies in the 2.1 and 2.5 GHz Bands, *Order on Reconsideration*, Gen. Docket Nos. 90-54 and 80-113, 6 FCC Rcd 6764, 6776 (paras. 61-62) (1991) (*Wireless Cable Reconsideration Order*) (denying petitions for reconsideration claiming that licensing procedure violated the Communications Act because it effectively deprives applicants from filing mutually exclusive applications).

²³⁵ *See Space Station Reform NPRM*, 17 FCC Rcd at 3849 n.3, and Orders cited therein.

²³⁶ The Commission adopted a unified licensing framework in Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, *Report and Order*, CC Docket No. 95-41, 11 FCC Rcd 2429 (1996) (*DISCO I Order* or *DISCO D*). The term "separate system" referred to international satellite systems separate from INTELSAT. *See* Establishment of Satellite Systems Providing International Communications, Report and Order, CC Docket No. 84-1299, 101 FCC 2d 1046, 1174 (1985) (*Separate Systems Order*), *recon.* 61 Rad.Reg.2d 649 (1986), *further recon.* 1 FCC Rcd 439 (1986).

²³⁷ *See, e.g.,* Loral Space & Communication Ltd., f/k/a Orion Atlantic, L.P., for Authority to Launch and Operate a Hybrid Ku-band/C-band Satellite System at the 37.5° W.L. Orbit Location, *Memorandum Opinion and Order*, 16 FCC Rcd 12490, 12492 (para. 7) (Int'l Bur. 2001); GE American Communications, Inc., *Order and Authorization*, 10 FCC Rcd 13775, 13775-76 (para. 6) (Int'l Bur. 1995) (*GE Americom Replacement Order*); Loral Spacecom Corp., *Order and Authorization*, 13 FCC Rcd 16348, 16440 (para. 5) (Int'l Bur., Sat. and Rad. Div., 1995).

respectively.²³⁸ We have also granted licenses for satellite land remote sensing systems outside of processing rounds.²³⁹ Finally, when in-orbit, non-U.S.-licensed satellite operators seek access to the U.S. satellite market under the Commission's *DISCO II* framework,²⁴⁰ we consider those requests outside of processing rounds. For these reasons, we conclude that neither the Communications Act nor *Ashbacker* require us to consider satellite license applications in processing rounds.

c. Qualifications

104. *Background.* PanAmSat assumes that the first-come, first-served approach would lead to issuing licenses without consideration of whether the licensee is qualified, and asserts that such a procedure would lead to litigation.²⁴¹ In contrast, Teledesic contends that the first-come, first-served approach would not and could not preclude the Commission from determining whether an applicant is qualified before granting a license.²⁴²

105. *Discussion.* We intend to consider an applicant's qualifications before granting it a license. We stated specifically in the *Space Station Reform NPRM* that we would place applications on public notice.²⁴³ We also noted that the first-come, first-served procedure allows us to deny applications when appropriate, including but not limited to concerns raised in petitions to reject that application.²⁴⁴

d. Consistency with Commission Precedent

106. *Background.* In the *Notice*, the Commission observed that it has used a first-come, first-served procedure for FM radio licenses, and that this experience might provide a potentially sound, efficient basis for revising its satellite licensing process.²⁴⁵ Some commenters claim that

²³⁸ PanAmSat Licensee Corporation, Application for Authority to Launch and Operate a Hybrid Replacement Fixed Satellite Service Space Station, *Order and Authorization*, 15 FCC Rcd 22156, 22157-58 (para. 5) (Int'l Bur., Sat. and Rad. Div., 2000).

²³⁹ Application of EarthWatch Incorporated For Authority to Construct, Launch and Operate a Remote Sensing-Satellite System, *Order and Authorization*, 10 FCC Rcd 10467 (Int'l Bur., 1995) (*EarthWatch Authorization Order*). Remote-sensing satellites use in-orbit passive optical sensors to measure light reflected from the earth's surface, and then transmit that information to a central earth station where it is transformed into useable information about the "remotely sensed" object or phenomenon. *EarthWatch Authorization Order*, 10 FCC Rcd at 10467 (para. 2). Satellite remote-sensing systems can be used for mapping, resource conservation, law enforcement, national security, environmental monitoring, and forecasting functions. *EarthWatch Authorization Order*, 10 FCC Rcd at 10468 (para. 6).

²⁴⁰ *DISCO II*, 12 FCC Rcd at 24174 (para. 186). We describe the *DISCO II* framework in detail below.

²⁴¹ PanAmSat Comments at 6-7. *See also* Hughes Comments at 11-12.

²⁴² Teledesic Reply at 23-24.

²⁴³ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 33).

²⁴⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 33).

²⁴⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3858-59 (paras. 29-31).

any reliance on the first-come, first-served procedure for broadcast licenses is misplaced, because that procedure is not the same as the Commission's satellite first-come, first-served proposal.²⁴⁶ Hughes also notes that the Commission has employed processing rounds for satellite licenses for a long time, and asserts that the proposals in the *Notice* constitute an arbitrary and capricious change in policy unless the Commission provides an adequate explanation.²⁴⁷ Teledesic replies, among other things, that the Commission has authority to change its procedures in rulemaking proceedings.²⁴⁸

107. *Discussion.* These contentions do not persuade us to reject the proposals in the *Notice*. Courts have held that the Commission had broad discretion to determine whether and when to initiate a rulemaking.²⁴⁹ Courts have also held that administrative agencies are free to adjust or abandon its proposals in light of public comments or agency reconsideration.²⁵⁰ Therefore, we disagree with Hughes that Commission precedents or practices can limit or preclude the Commission from inviting comment on any particular rule change in a rulemaking proceeding. Furthermore, in the *Notice*, the Commission explained in detail why the satellite licensing process needs reform.²⁵¹ Moreover, commenters overstate the extent to which we rely on the broadcast first-come, first-served procedure. The Commission stated that, because that procedure was successful, it might provide a good starting point for revising satellite licensing procedures. Specifically, "we invite[d] comment on appropriate procedural revisions consistent with a first-come, first-served approach, with certain modifications to make it fit satellite licenses."²⁵²

E. Details of First-Come, First-Served Procedure

1. General Framework

a. Establishment of Queues

²⁴⁶ Hughes Comments at 14-20; Boeing Comments at 5-6; SIA Comments at 9.

²⁴⁷ Hughes Comments at 21-23. *See also* Hughes Comments at 4-5, *citing* Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, *Order on Reconsideration*, IB Docket No. 95-41, 16 FCC Rcd 15579 (2001) (*DISCO I Reconsideration Order*).

²⁴⁸ Teledesic Reply at 13-16, *citing* Committee for Effective Cellular Rules v. FCC, 53 F.3d 1309, 1317 (D.C. Cir. 1995), Florida Cellular Mobil Communications Corp. v. FCC, 28 F.3d 191, 196-97 (D.C. Cir. 1994), *cert. denied* 514 U.S. 1016 (1995); Rainbow Broadcasting Co. v. FCC, 949 F.2d 405, 409 (D.C. Cir. 1991).

²⁴⁹ *See* WWHT v. FCC, 656 F.2d 807 (D.C. Cir. 1981) (Commission has broad discretion to determine whether and when to initiate a rulemaking). *See also* Telecommunications Resellers Assn. v. FCC, 141 F.3d 1193, 1197 n.6 (D.C. Cir. 1998) (Commission has discretion to initiate rulemaking even in case where the court found that a rulemaking was not "necessary" to implement a statutory requirement).

²⁵⁰ Kooritsky v. Reich, 17 F.3d 1509, 1513 (D.C. Cir. 1994); International Harvester Co. v. Ruckelshaus, 478 F.2d 615, 632 & n.51 (D.C. Cir. 1973).

²⁵¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3852-55 (paras. 12-20).

²⁵² *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 31).

108. *Background.* Under the proposal in the *Notice*, we would consider applications for each particular geostationary satellite orbit (GSO) satellite license, one at a time in the order they were filed.²⁵³ Teledesic suggests that the procedure would work better if the Commission maintained a single queue rather than a separate queue for each orbit location and/or frequency band. Under Teledesic's proposal, the Commission would review all satellite applications in the order they are filed, regardless of the orbit location and frequency band requested. Teledesic recommends further that the Commission grant each application that complies with the Commission's rules and does not conflict with any previously granted license, and otherwise deny the application.²⁵⁴

109. *Discussion.* We agree with Teledesic that establishing a separate queue for each GSO orbital location could unnecessarily complicate the first-come, first-served procedure. For example, if an applicant seeks authority for the 96° W.L. location, it is not clear whether that application should be included in the same queue as an application for the 95° W.L. location, or the 97° W.L. location, or whether all three applications should be included in the same queue. By including all applications in one queue, we can consider all issues relating to that application, such as compliance with the Commission's two-degree spacing framework and interference with adjacent satellites operating in the same frequency bands.²⁵⁵ We will make a current list of applications in the queue publicly available.

110. We also recognize that some applications will necessarily require more time to review than others. In cases in which we are reviewing an application that raises such unusually complex issues, it would not serve the public interest to delay consideration of all subsequently filed applications while we resolve those complex issues. Therefore, we may act on some of those subsequently filed applications before we act on the complex application. Those subsequent applications will be considered one at a time in the order they are filed, but only if they are not mutually exclusive with a previously-filed application. We will act on those mutually exclusive applications after we act on the complex application.

b. Keeping Subsequently Filed Applications on File

111. *Background.* After we issue a license, we proposed keeping subsequently filed applications on file. If at any time the licensee loses its license, for failure to meet the first milestone or for any other reason, the next application in the queue would be considered. We also proposed returning the later-filed applications to those applicants if and when the licensee places its satellite or satellites in operation, and to return the associated application fee at that time upon the applicant's request.²⁵⁶

112. *Discussion.* All the parties commenting on this issue oppose keeping subsequent applications on file to be considered in the event that a licensee loses its license. Teledesic claims that keeping subsequent applications on file would encourage speculative or "place holder"

²⁵³ *Space Station Reform NPRM*, 17 FCC Rcd at 3859 (para. 32).

²⁵⁴ Teledesic Comments at 13-17; Teledesic Reply at 20-21.

²⁵⁵ We discuss our treatment of hybrid applications, and applications with feeder link or intersatellite link requests below.

²⁵⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34).

applications, and discourage applications by parties with innovative methods for using or sharing spectrum.²⁵⁷ SES Americom argues that, if the lead applicant does not build its system, there would be delay before the next application could be processed, and this delay could discourage other parties from applying for competing licenses.²⁵⁸ SES Americom also asserts that this delay could cause the United States to lose its international priority at the location in question.²⁵⁹

113. We decide not to keep subsequently filed applications on file. In other words, if an application reaches the front of the queue that conflicts with a previously granted license, we will deny the application rather than keeping the application on file in case the lead applicant does not construct its satellite system. We agree with Teledesic that keeping applications on file would encourage speculative or "place holder" applications. Moreover, we proposed keeping applications on file because we thought it would expedite reassignment of the orbit location in cases where a licensee loses a license. Under a single queue approach, we could reassign the orbit location just as quickly, or perhaps more quickly, if we accept new applications at the time the location becomes available. For these purposes, we will consider an orbit location to become "available" at the time we adopt an Order revoking a license in cases where we revoke the license, or upon release of a public notice announcing that a licensee has surrendered its license in cases where the licensee surrenders its license.²⁶⁰ Thus, all parties potentially interested in providing satellite service from the orbit location at issue have an equal opportunity to apply for the license when that orbit location becomes available.²⁶¹ In summary, we will deny applications that conflict with previously granted applications because it is more likely to result in faster service to the public, and it will not disadvantage any party that may wish to apply for that orbit location if it becomes available.

114. Our decision not to keep subsequently filed applications on file pending the successful launch of a satellite moots the issue of whether to allow applicants to request the fees associated with their applications to be returned when a licensee launches its satellite.²⁶² Although no one commented specifically on this proposal, we emphasize that everyone commenting on the underlying proposal to keep subsequent applications on file opposed it.²⁶³ Accordingly, parties applying for a license that is mutually exclusive with a previously filed application are on notice that they will not be able to request an application fee refund after the application is placed on public notice.

²⁵⁷ Teledesic Comments at 17-20; Teledesic Reply at 19-20.

²⁵⁸ SES Americom Comments at 3-4.

²⁵⁹ SES Americom Comments at 3-4.

²⁶⁰ In the event that a licensee files a petition for reconsideration or application for review of a decision to revoke a license, we would grant the new license subject to the outcome of the reconsideration or review proceeding.

²⁶¹ We will give applicants the option of assuming the previous licensee's ITU filing or submitting a new filing.

²⁶² *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34).

²⁶³ Teledesic Comments at 17-20; Teledesic Reply at 19-20; SES Americom Comments at 3-4.

c. Fees

115. *Background.* The Commission invited comment on allowing an applicant to request the return of the application fee if it voluntarily withdraws its application before it is placed on public notice.²⁶⁴ After the application is placed on public notice, however, the Commission maintained that it would no longer be appropriate to return the application fee.²⁶⁵ No one commented on this proposal.

116. *Discussion.* We adopt this proposal. Application fees represent the Commission's estimate, accepted by Congress, on the *average* cost to the Commission of providing the service.²⁶⁶ The Commission incurs a cost regardless of the final result to the applicant, and it is on that basis that the Commission proposed to Congress that fixed processing costs be recovered from each applicant through fees.²⁶⁷ Therefore, once that application has cleared the fee review process, its subsequent rejection will not result in a fee refund. The conclusion of the fee review process coincides with the date that the application is placed on public notice. Consequently, we adopt the proposal in the *Notice* to allow requests for the return of GSO-like satellite license application fees if the applicant voluntarily withdraws its application before it is placed on public notice. This procedure is also similar to the Commission's first-come, first-served rules for broadcast licenses, which were cited in the *Notice*.²⁶⁸

d. Service Rules

117. *Background.* In the *Notice*, the Commission proposed holding applications in abeyance if they are filed after the Commission has adopted a frequency allocation for the proposed service, but it has not adopted service rules.²⁶⁹ Commenters offered differing opinions on this proposal. Teledesic opposes the proposal to hold applications in abeyance pending adoption of service rules, because service rules may not be needed in all cases.²⁷⁰ CTIA opposes accepting satellite applications before service rules are adopted.²⁷¹

²⁶⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34).

²⁶⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34).

²⁶⁶ Establishment of a Fee Collection Program to Implement the Provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, *Memorandum Opinion and Order*, Gen. Docket No. 86-285, 3 FCC Rcd 5987, 5987 (para. 5) (1988).

²⁶⁷ Establishment of a Fee Collection Program to Implement the Provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, *Report and Order*, Gen. Docket No. 86-285, 2 FCC Rcd 947, 949 (para. 14) (1987).

²⁶⁸ See *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34), *citing* 47 C.F.R. § 1.1113(c).

²⁶⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 35).

²⁷⁰ Teledesic Comments at 20-22.

²⁷¹ CTIA Comments at 2-3.

118. *Discussion.* We reject the proposal in the *Notice* to hold in abeyance applications filed before service rules are adopted until the Commission adopts such rules. As we noted above in the context of adopting default service rules for NGSO-like satellite system applications, SIA and Intelsat argue that it is not necessary to develop service rules for each new satellite service, and recommend adopting uniform service rules for future satellite services.²⁷² We agree. Consequently, we adopt default service rules as suggested by SIA and Intelsat for GSO-like satellite system applications. In light of these default rules, we will be able to act on applications as they are filed and therefore need not consider further the issue of holding applications in abeyance pending final service rules.

119. None of the commenters in this proceeding propose specific default service rules. We will apply the two-degree-spacing requirements that we currently apply to GSO-like satellites in the C-band, Ku-band, and Ka-band satellites to GSO-like proposed satellites in different frequency bands.²⁷³ Specifically, we will apply the requirements set forth in Appendix C. By applying these requirements, we can be assured that satellites in new bands will be designed to allow other satellites to operate in that band as close as two degrees away. This decision does not preclude us from considering other service rules, or from adopting other service rules in notice-and-comment rulemaking proceedings. Rather, when we issue licenses in new frequency bands that comply with our two-degree-spacing requirements, we will do so subject to any band-specific service rules, or rules for earth station coordination in shared bands, that we may adopt in the future.

120. In addition, as we did with respect to NGSO-like satellite licenses, we will require GSO-like satellite licensees to comply with applicable ITU requirements when we issue a license before we adopt frequency-band-specific service rules.²⁷⁴ We will also require GSO-like satellite licensees operating in bands shared with other commercial operations to communicate only with earth stations that have been coordinated pursuant to Section 25.203. Finally, we will coordinate with NTIA regarding the operations of GSO-like satellite licensees operating in bands shared by Government and non-Government uses.

121. Establishing default service rules based on our two-degree-spacing policy provides an additional benefit by ensuring opportunities for competitive entry by GSO-like satellite operators. In addition, granting licenses before we adopt final service rules should allow licensees to meet their ITU bringing-into-use dates. Furthermore, unnecessary delay in considering satellite applications is contrary to the public interest, as we explained in the *Space Station Reform NPRM*.²⁷⁵ Accordingly, we will not adopt CTIA's proposal to preclude consideration of satellite applications before we adopt service-band-specific service rules.

e. Frequency Allocations

²⁷² Section V.D.1., *citing* SIA Comments at 13-14; Intelsat Comments at 9.

²⁷³ We note, however, that the power flux density (PFD) limits applicable to the C-band, Ku-band, and Ka-band are not included in our default service rules for GSO-like satellites. Instead, licensees will be required to comply with the applicable PFD limits established in the ITU Radio Regulations for the frequency band in which they plan to operate.

²⁷⁴ Section V.D.1.

²⁷⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3852-53 (paras. 12-14).

122. *Background.* In cases where a party files a satellite application, and there is no international or domestic frequency allocation for the proposed service, the Commission proposed allowing the application to remain pending until the frequencies were allocated.²⁷⁶ In the past, the Commission used the satellite system applications received in processing rounds as justification to pursue an international allocation for the service. In the *Notice*, the Commission expected to continue this practice.²⁷⁷

123. *Discussion.* CTIA opposes accepting satellite applications before frequency allocations are adopted.²⁷⁸ Teledesic maintains that the Commission could decide on a case-by-case basis to hold applications in abeyance pending an international frequency allocation.²⁷⁹

124. Because it can take several years for the ITU to adopt an international frequency allocation, we will dismiss GSO-like satellite applications without prejudice as premature if the application is filed before the ITU adopts a necessary frequency allocation. In this Order above, we also decided to dismiss NGSO-like satellite applications filed before a needed international frequency allocation.²⁸⁰ In the past, the Commission has accepted applications before needed international frequency allocations were adopted so that it could demonstrate that the frequency allocation is needed. We conclude here that a petition for rulemaking to amend the Table of Frequency Allocations²⁸¹ can serve the same purpose.²⁸² Furthermore, when an applicant files its application years before it will be possible to provide service, it is likely that the application may be a "place holder." Accordingly, we will dismiss satellite applications without prejudice as premature if the application is filed before the ITU adopts a necessary international frequency allocation. We will, however, consider applications filed after the ITU adopts an international frequency allocation but before the Commission adopts a domestic allocation. We will consider such applications only on a non-conforming, non-harmful interference basis to facilities operating consistent with the Table of Frequency Allocations.²⁸³ In addition, parties seeking authority to operate on a non-conforming basis must request a waiver of Section 2.106 of the Commission's rules,²⁸⁴ and must demonstrate good cause for that waiver.²⁸⁵

²⁷⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 37).

²⁷⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 37).

²⁷⁸ CTIA Comments at 2-3.

²⁷⁹ Teledesic Comments at 17.

²⁸⁰ Section V.D.1.

²⁸¹ 47 C.F.R. § 2.106.

²⁸² Although we will no longer accept satellite applications before an international frequency allocation is adopted, we will submit advance notice publications to the ITU on behalf of U.S. entities before an international frequency allocation is adopted, provided that the entity agrees to pay all ITU cost recovery fees. Preparing an advance publication will not give a party any standing in any queue.

²⁸³ In the event that the Commission later adopts a frequency allocation, any entity operating on a non-conforming, non-harmful interference basis will be required to come into compliance with the rules governing that allocation.

²⁸⁴ 47 C.F.R. § 2.106.

f. Feeder Links and Inter-Satellite Links

125. *Background.* In the *Notice*, the Commission observed that some MSS services use feeder links, which are radio links that transmit a user's messages in both directions between the system's satellites and the gateway earth station that connects the MSS network with the public switched telephone network.²⁸⁶ Other satellite services employ inter-satellite service links, by which satellites in a constellation may communicate with each other.²⁸⁷ The Commission proposed using the first-come, first-served procedure for applications for feeder links or inter-satellite links, and considering service link requests separately from requests for feeder links or intersatellite links.²⁸⁸ The Commission recognized that this could result in granting service band authority and feeder link authority to different parties, but reasoned that applicants that are not authorized to use the feeder link frequencies they requested can apply for authority to operate in other feeder link frequencies.²⁸⁹

126. *Discussion.* SES Americom argues that considering feeder links and intersatellite links separately from service link requests would increase delay because the licensee could not proceed with its business plan until it receives all the authority it requests.²⁹⁰ SES Americom is also concerned that considering these requests separately might prevent an applicant from obtaining all the authority it requests.²⁹¹

127. We will consider requests for service link authority separately from feeder link and intersatellite link requests.²⁹² SES Americom is mistaken in assuming that separate processes for service link, feeder link, and intersatellite link requests would not allow us to issue satellite licenses faster than we could in a processing round. This is because, as we explained in the *Notice*, the current procedure is particularly slow when it is used to consider feeder link and intersatellite link requests.²⁹³ Because both the modified processing round approach and the first-

²⁸⁵ See *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C.Cir., 1969); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C.Cir., 1990).

²⁸⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3860-61 (para. 38), citing *2 GHz Order*, 15 FCC Rcd at 13156 (para. 68).

²⁸⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3860-61 (para. 38), citing *2 GHz Order*, 15 FCC Rcd at 13156 (para. 68); *PanAmSat Licensee Corp. Application for Authority to Construct, Launch, and Operate a Ka-Band Communications Satellite System in the Fixed-Satellite Service at Orbital Locations 58° W.L. and 125° W.L.*, *Memorandum Opinion and Order*, 16 FCC Rcd 11534, 11535 (para. 4) (2001) (*PanAmSat Ka-band License Cancellation Review Order*).

²⁸⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3860-61 (para. 38).

²⁸⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3861 (para. 39).

²⁹⁰ SES Americom Comments at 7-8.

²⁹¹ SES Americom Comments at 8.

²⁹² Although we will consider these requests separately, we will allow applicants to include service link requests and feeder link or intersatellite link requests in the same application.

²⁹³ *Space Station Reform NPRM*, 17 FCC Rcd at 3853-54 (paras. 15-18).

come, first-served approach are faster than the current procedure, considering feeder link and intersatellite link requests separately from service link requests will eliminate substantial delay in service to the public. Moreover, under the single queue approach we adopt above, we will begin our consideration of a service link request and its associated feeder link or intersatellite link request at the same time. Thus, it is not likely that there will be a long time between our action on the service link request and our action on the feeder link or intersatellite link request. Conversely, on occasion, there have been long periods of time between service link authorizations and feeder link or intersatellite link authorizations under our current procedures.²⁹⁴ In any case, we will continue to give licensees 30 days to decide whether to accept the license.

128. We disagree with SES Americom that considering feeder link and intersatellite link requests separately from service link requests, by itself, might prevent an applicant from obtaining all the authority it requests. In cases where both service link and feeder link requests are considered in modified processing rounds, all qualified applicants will get some service link authority and some feeder link authority. In cases where we consider a feeder link request pursuant to the first-come, first-served procedure, we would grant the request unless the applicant is not qualified, or we previously granted that authority to another applicant. Trying to combine our review of service link requests together with our review of feeder link and intersatellite link requests would not have any effect on our substantive decisions regarding each satellite application. It would make the analysis more complex and lengthen the procedure, however.

129. In addition, even if considering feeder link and intersatellite link requests separately from service link requests prevented an applicant from obtaining all the authority it requests, this would not warrant rejection of the Commission's proposal.²⁹⁵ MSS systems have a great deal of flexibility. In cases where an applicant is not granted the specific feeder link or intersatellite link authority it requests, the licensee will often still be able to satisfy its requirements by applying for other frequencies. Alternatively, in cases where the licensee's MSS satellite system employs a GSO satellite, there are usually several orbital positions available at which a GSO satellite could communicate with the MSS system's gateway earth stations. This gives the licensee additional flexibility in provisioning its feeder links. In any case, as a result of eliminating the anti-trafficking rule for satellites,²⁹⁶ an applicant will be able to negotiate with other licensees to purchase feeder link or intersatellite link authority.

130. Furthermore, we must consider service link requests separately from feeder link and intersatellite link requests in cases in which the service link application may not fall under the same classification as its associated feeder link or intersatellite link request. In such cases, considering service link and feeder link requests together would require the Commission to consider part of an application pursuant to a procedure that is not well suited to that request. By considering service link requests separately from feeder link or intersatellite link requests, we can ensure that this situation will not arise.

²⁹⁴ See, e.g., GE Americom Communications Galaxy Inc. Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed Satellite Service, *Order and Authorization*, 12 FCC Rcd 6475 (Int'l Bur., 1997); GE American Communications, Inc., Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, *Order and Authorization*, 16 FCC Rcd 2461 (Int'l Bur., 2001) (about three-and-a-half years between service band authorizations and intersatellite link authorizations in first Ka-band processing round).

²⁹⁵ SES Americom Comments at 8.

²⁹⁶ Section VII.D.

131. Accordingly, our procedures for applications for feeder link or intersatellite link authority will be consistent with our procedures for the associated service link application. In cases where the proposed service link is a GSO-like service, the first-come first-served procedure set forth in this section of the Order will apply. Examples of these applications are requests for an intersatellite link between two GSO satellites, and requests for a feeder link between a fixed earth station and a GSO satellite. In all other cases, where the associated service link application proposes an NGSO-like satellite system, the modified processing round procedure will apply.²⁹⁷ We also note that licensees will be allowed 30 days to decide whether to accept any license grant.

2. Selection Among Mutually Exclusive Applications

132. *Background.* In the *Notice*, the Commission pointed out that a first-come, first-served procedure requires some method for deciding among two or more mutually exclusive space station applications that are filed on the same day.²⁹⁸ As a first-tier selection mechanism, the Commission proposed mandatory electronic filing for satellite applications, and considering applications in the chronological order that they are filed, to the nearest thousandth of a second, regardless of whether it receives the application after the close of business or during a weekend.²⁹⁹ As a second-tier selection mechanism, in the rare event that two applications requesting the same frequencies are filed at the same instant, the Commission proposed dividing the available spectrum by the number of mutually exclusive applicants.³⁰⁰ The Commission noted that it adopted this approach in the *2 GHz Order*.³⁰¹

133. *Discussion.* Teledesic supports basing the filing status of applications on the time each application is filed, measured to the nearest thousandth of a second, because it expects this will eliminate cases of mutual exclusivity.³⁰² Teledesic also argues that the Commission's proposed sharing method is acceptable, provided that there are few cases in which mutually exclusive applications must be considered together.³⁰³

²⁹⁷ We discuss milestones for satellite systems using feeder links or intersatellite links in Section VII.C.7. below.

²⁹⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3862-63 (para. 45).

²⁹⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3862-63 (para. 45). As discussed below, we expect to manage this process by adopting our mandatory electronic filing proposal in this Order.

³⁰⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3863 (para. 46).

³⁰¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3863 (para. 46), *citing 2 GHz Order*, 15 FCC Rcd at 16138 (para. 16).

³⁰² Teledesic Comments at 22; Teledesic Reply at 21-22.

³⁰³ Teledesic Comments at 23. In the event that the Commission adopts any procedure in which a large number of mutually exclusive applications must be considered together, Teledesic opposes band segmentation, claiming that there are other sharing methods that make more use of the available spectrum. Teledesic does not identify those other methods, however. Teledesic Comments at 22-24. Teledesic argues further that, in the event that we adopt a procedure that allows for mutually exclusive applications to be considered together, we should allow negotiations and not limit them to a 60-day period. Teledesic Comments at 23.

134. We adopt our proposal to base the filing status of satellite applications on the time each application is filed measured to the nearest thousandth of a second. As Teledesic points out, this will limit the number of applications that must be considered together, and so should enable us to expedite our review of satellite applications substantially. Also, as we explained above, there is nothing in the Communications Act that precludes us from defining mutual exclusivity narrowly, to facilitate the orderly administration of applications.³⁰⁴

135. We also adopt our proposed second-tier selection mechanism of dividing the spectrum at a particular orbit location evenly among the applicants in cases where two or more applicants file mutually exclusive applications at the same thousandth of a second. Because there should be very few cases in which multiple applicants file at the same thousandth of a second, if any, we do not envision a situation where a GSO-like satellite applicant will be authorized to use less than half the spectrum at a given orbit location.³⁰⁵ In those rare cases in which a licensee is authorized to use only half the spectrum at a given orbit location, it may be possible for both licensees to provide a viable service with that spectrum. Further, by eliminating the anti-trafficking rule for satellites, licensees will be able to purchase each other's spectrum rights and responsibilities.

3. Amendments

136. *Background.* In the *Space Station Reform NPRM*, the Commission noted that its first-come, first-served procedure for broadcast license applications included a provision that amendments to an application that create a conflict with any other application filed prior to the amendment would cause the underlying application to lose its "status" relative to applications behind it in the queue.³⁰⁶ The Commission observed further that a "major" amendment to a satellite application in a processing round is treated like a new application, and so a major amendment filed after a cut-off date causes the underlying application to be removed from the processing round.³⁰⁷ Generally, a "major amendment" is one that increases the potential for interference to other applicants or licensees.³⁰⁸ The Commission proposed revising its satellite application amendment rules so that a major amendment to a satellite application in a first-come, first-served procedure would cause the underlying application to be moved to the end of the queue.³⁰⁹

³⁰⁴ Section VI.D.9.b. above, *citing, e.g., Ashbacker*, 326 U.S. at 333 n.9.

³⁰⁵ In fact, the only time we think that the probability of two or more applications file at the same thousandth of a second is more than *de minimis* is the time that the rule revisions we adopt in this Order take effect. We adopt safeguards for this possibility in Section VII.E. below.

³⁰⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3866 (para. 55), *citing TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 31).

³⁰⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3866-67 (para. 56), *citing* 47 C.F.R. § 25.116.

³⁰⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3866-67 (para. 56), *citing* 47 C.F.R. § 25.116(b)(1).

³⁰⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3866-67 (para. 56).

137. Furthermore, to prevent applicants from bypassing this prohibition by merging with another company or transferring control of its business, the Commission proposed treating such transactions as major amendments that cause any pending applications filed by that applicant to be treated as a new application for purposes of determining processing order. In other words, the Commission did not propose a blanket prohibition on such transfers that otherwise meet the requirements of our rules, but rather proposed moving the pending applications of the parties in the transaction to the end of the relevant queue.³¹⁰ We did not expect adoption of this proposal to deter a significant number of legitimate business transactions. This was because, in most cases in which the parties to the transaction have assets or provide services, the effects of the transaction on their pending satellite applications would appear to be a small consideration, especially given that they would have a limited number of pending applications under our proposed rules.³¹¹

138. *Discussion.* Teledesic supports the Commission's proposal for considering amendments to pending applications in a first-come, first-served procedure.³¹² SES Americom and Teledesic assert that treating a transfer of control application as a major amendment with respect to pending satellite license applications could deter applicants from entering into legitimate business transactions, however.³¹³

139. Commenters focus their attention on the treatment of transfers of control as a major amendment, but do not specifically oppose the Commission's proposal to move an application to the end of the queue when the applicant files a major amendment to that application. Accordingly, we adopt this proposal. We will treat major amendments to GSO-like satellite license applications as newly filed applications. Major amendments will cause the license application to be moved to the end of the queue.

140. Transfers of control are treated as major amendments under our current rules.³¹⁴ Thus, in effect, SES Americom and Teledesic are requesting us to revise our rules so that transfer of control applications are no longer considered major amendments. We adopt the commenters' recommendation. The Commission did not intend the first-come, first-served procedure to deter legitimate business transactions. Accordingly, in light of the evidence in the record that continuing to treat transfers of control as major amendments in a first-come, first-served procedure might deter legitimate business transactions, we revise this rule. We also revise this rule for NGSO-like satellite system applications considered in modified processing rounds. We see no reason to treat transfers of control differently in the two licensing procedures we adopt in this Order.³¹⁵

4. Modifications

³¹⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3865-66 (para. 53).

³¹¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3865-66 (para. 53).

³¹² Teledesic Comments at 24.

³¹³ SES Americom Comments at 5; Teledesic Comments at 30.

³¹⁴ 47 C.F.R. § 25.116(b)(3).

³¹⁵ In the event of a merger, the limits on pending applications and unbuilt satellites will apply to the new company, and it will be required to withdraw applications to the extent that it exceeds those limits. *See* Section VII.E.3.

141. *Background.* Modifications are changes to a licensee's operating authority after the license has been granted. In the *Notice*, the Commission proposed retaining our current modification procedure as part of our first-come, first-served approach, with a few exceptions.³¹⁶ First, in those rare cases in which two or more applications are submitted at the same thousandth of a second, and we divide the spectrum at a particular orbit location evenly among the applicants pursuant to the second-tier selection mechanism,³¹⁷ the Commission proposed that it would not consider modification requests seeking to increase the licensee's bandwidth.³¹⁸ Second, for modification requests such as relocating a GSO satellite to a new orbital location, or to add additional operating spectrum, the Commission would place those modification requests behind other applications with priority in the queue, and behind any other previously filed conflicting application.³¹⁹

142. *Discussion.* The Commission's proposal for considering modification requests in a first-come, first-served procedure is in accord with Teledesic's single-queue proposal that we adopted above.³²⁰ Modification requests can be placed in the queue together with new license applications, and granted if they are not inconsistent with any previously granted license or modification.

143. Teledesic argues, however, that there are some license modifications that do not increase the likelihood of interference, and that the consideration of such modification requests should not be delayed pending considerations of other applications.³²¹ Teledesic recommends considering modification requests outside of any queue if they do not "degrade" the interference environment, and classifying such requests as "minor." Teledesic recommends classifying other modification requests as "major" and considering them only after consideration of previously filed applications.³²² Teledesic recommends making the determination between major and minor modification requests on a case-by-case basis.³²³

144. We do not adopt Teledesic's proposal at this time. The first-come, first-served procedure will enable the Commission to act on new satellite license applications more quickly

³¹⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3867 (para. 58).

³¹⁷ Section VI.E.2. above.

³¹⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3867 (para. 57).

³¹⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3867 (para. 58).

³²⁰ Section VI.E.1.a.

³²¹ Teledesic Comments at 25-26. According to Teledesic, "current law" distinguishes between major and minor modifications based on whether the modification increases or decreases the likelihood of interference. Teledesic Comments at 24-25. Teledesic is mistaken. Section 25.117(d) does not distinguish between major and minor modifications for space station licenses. This mistake does not, however, preclude us from considering Teledesic's proposal.

³²² Teledesic Comments at 26-27.

³²³ Teledesic Comments at 27.

than is now possible,³²⁴ and should expedite our review of modification requests as well. Further, deciding whether a proposed modification increases the potential for interference often requires a complex analysis. Unless we can categorically classify some modifications as "minor," conducting such a complex case-by-case analysis of modification requests as they are filed will delay action on other applications in the queue.³²⁵

5. Hybrids

145. *Background.* Hybrid satellites are satellites designed to operate in more than one frequency band.³²⁶ We try to encourage deployment of hybrid satellites because there are cost benefits in implementing several service bands on a single space platform.³²⁷ In the *Notice*, when the Commission was contemplating a first-come, first-served procedure with a separate queue for each orbit location and each band, the Commission proposed considering hybrid applications as follows. In cases where the applicant is first in the queue in both frequency bands, the Commission would simply grant the application. In cases where the applicant is first in the queue in only one frequency band, the Commission proposed to grant authority to operate in that band, and deny authority to operate in the other band.³²⁸ In cases where one of the frequency bands has not been allocated for satellite service, or where the Commission has adopted service rules for only one of the bands, the Commission proposed granting authority to operate in one frequency band. The application would remain pending with respect to the band without the international or domestic frequency allocation or service rules, consistent with the Commission's proposed first-come, first-served procedure for single band satellites.³²⁹

146. *Discussion.* Hughes contends that a first-come, first-served procedure would discourage hybrid satellites, assuming that two separate queues would seldom be aligned.³³⁰ SES Americom argues that a hybrid satellite applicant could be foreclosed from using a "critical frequency band" if another applicant filed for that band a few seconds before the hybrid applicant.³³¹ Teledesic contends that adopting its proposal to create a first-come, first-served procedure with one queue would simplify treatment of hybrid satellite applications more than the Commission's proposed first-come, first-served procedure.³³²

³²⁴ Section VI.D.2. above. *See also* Teledesic Comments at 27-28.

³²⁵ Some parties have proposed such a categorization for space station modifications. We will consider those proposals in a future Order.

³²⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3868 (para. 59).

³²⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3868 (para. 59), *citing* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Third Report and Order*, CC Docket No. 92-297, 12 FCC Rcd 22310, 22322 (para. 31) (1997) (*Ka-Band Service Rules Order*).

³²⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3868 (para. 60).

³²⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3868 (para. 61).

³³⁰ Hughes Comments at 31.

³³¹ SES Americom Reply at 9.

³³² Teledesic Comments at 17.

147. In this Order above, we adopt a single queue to implement our first-come, first-served approach.³³³ We explain that a single queue eliminates the issues raised by maintaining a queue for each orbit location, and allows us to expedite our process by reviewing applications in different bands at the same time. Consistent with that decision, we will consider together both frequency band requests in a hybrid satellite application for purposes of the first-come, first-served procedure.³³⁴ Under this approach, when an applicant files a hybrid application, and that application reaches the head of the queue, we will grant it if the applicant is qualified, and granting authority to operate in that band would not conflict with any previously filed license. In cases where the applicant meets these standards for both requested frequency bands,³³⁵ we will authorize the requested hybrid satellite. In other cases, we may authorize the applicant to operate in only one of its requested frequency bands. Also, as we proposed in the *Notice*, our treatment of hybrid satellite applications in which we have not adopted a frequency allocation or service rules for one or both of the bands will be consistent with the procedure we adopted above for single band satellites.³³⁶ In other words, if we have not adopted service rules for one frequency band in a hybrid satellite application, we will authorize the applicant to operate in that band if it shows that it will be 2° compliant, and subject to any future service rules we may adopt.³³⁷ If we have not adopted a domestic frequency allocation in one band, we will dismiss the application in part with respect to that band, or grant operating authority on a non-conforming, non-interference basis.³³⁸

148. Finally, we conclude that SES Americom's concern, that some hybrid satellite applicants may not receive authority to operate in all the frequency bands they request, does not justify rejection of the first-come, first-served approach, either generally or for hybrid satellite applications. Satellite operators under the current procedure may not necessarily be awarded all of the spectrum requested.³³⁹ Moreover, eliminating the anti-trafficking rule will allow a licensee to purchase spectrum rights from another licensee in a number of cases, which would allow it to construct, launch, and operate its proposed hybrid satellite. Finally, we emphasize that one of the

³³³ Section VI.E.1.a.

³³⁴ An applicant filing a hybrid satellite applications will still be required to pay the fee for one satellite application, however.

³³⁵ As we did in the *Space Station Reform NPRM*, we assume that the application is acceptable for filing, and seeks authority to operate in two frequency bands to simplify this discussion. *Space Station Reform NPRM*, 17 FCC Rcd at 3868 n.71.

³³⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3868 (para. 61).

³³⁷ Section VI.E.1.d.

³³⁸ Section VI.E.1.e.

³³⁹ Application of Columbia Communications Corporation for Modification of Authorization to Permit Operation of Ku-band Satellite Capacity on the Columbia 515 Satellite Located at 37.7° West Longitude, *Memorandum Opinion and Order*, 16 FCC Rcd 12480 (Int'l Bur. 2001); Loral Space & Communication Ltd., f/k/a Orion Atlantic, L.P., for Authority to Launch and Operate a Hybrid Ku-band/C-band Satellite System at the 37.5° W.L. Orbit Location, *Memorandum Opinion and Order*, 16 FCC Rcd 12490 (Int'l Bur. 2001); Columbia Communications Corporation, *Memorandum Opinion and Order*, 15 FCC Rcd 15566, 15571 (para. 10) (Int'l Bur. 2000) (*First Columbia Milestone Order*).

overriding policy goals of this proceeding is to enable customers to get satellite service more quickly than is usually possible under our current procedure. Although we recognize that there are cost benefits in hybrid satellites,³⁴⁰ those benefits do not outweigh this overriding policy goal of expediting service to the public.³⁴¹

6. Filing Window

149. *Background.* In the *Notice*, the Commission noted that its procedure for broadcast licenses included an initial 30-day filing window. All applications filed during that window were considered together on a consolidated basis, while the first-come, first-served procedure applied only to applications filed after the close of the window.³⁴² We did not include a filing window in our first-come, first-served proposal for satellite license applications.³⁴³

150. *Discussion.* Teledesic and Intelsat supports the Commission's proposal.³⁴⁴ On the other hand, Hughes argues that, whenever an application is filed, the Commission must give other parties an opportunity to file applications that are mutually exclusive with the first application.³⁴⁵ We will not include a filing window in our first-come, first-served procedure for GSO-like satellites. We have previously considered and rejected Hughes's argument that the Communications Act requires the Commission to give applicants an opportunity to file mutually exclusive applications.³⁴⁶

F. Modified First-Come, First Served Proposal

151. *Background.* Intelsat proposes something it calls the modified first-come, first-served procedure.³⁴⁷ Intelsat intends all of its proposals to be considered together as a single package.³⁴⁸ This package of proposals may be summarized as follows:

³⁴⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3868 (para. 59), citing *Ka-band Service Rules Order*, 12 FCC Rcd at 22322 (para. 31).

³⁴¹ When a satellite operator proposed modifying its hybrid C/Ku-band satellite license to authorize two single-band satellites, the Bureau found that there were no compelling public interest considerations weighing against the modification request because the modification would "permit the expedited introduction of Ku-band service to customers. . ." *Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, Application of GE American Communications, Inc., for Modification of Authorization to Construct, Launch, and Operate a Space Station in the Fixed-Satellite Service, Memorandum Opinion and Order*, 14 FCC Rcd 686, 688 (para. 7) (Int'l Bur., Sat. and Rad. Div., 1998).

³⁴² *Space Station Reform NPRM*, 17 FCC Rcd at 3862 (para. 42), citing *TV and FM Broadcast Order*, 50 Fed. Reg. at 19940-41 (paras. 28-30).

³⁴³ *Space Station Reform NPRM*, 17 FCC Rcd at 3862 (paras. 43-44).

³⁴⁴ Teledesic Comments at 22; Intelsat Comments at 13-14.

³⁴⁵ Hughes Comments at 19-20.

³⁴⁶ Section VI.D.9.b. above; *Wireless Cable Reconsideration Order*, 6 FCC Rcd at 6776 (paras. 61-62).

³⁴⁷ Intelsat Comments at 8.

- Applies only to new license applications for orbital locations and spectrum with established service rules and frequency allocations, such as the C-band, Ku-band, and Ka-band, but not to services where band-segmentation is preferable, such as MSS. In other words, Intelsat would not apply this procedure to applications for authority to operate in a frequency band where needed service rules or allocations have not yet been adopted.³⁴⁹
- Applicants are allowed "partial fungibility." Under this proposal, an applicant that is second-in-line in a given queue is permitted to switch its application to a GSO orbit location for which there are no pending applications. If two or more second-in-line applicants switch to the same location, however, they would be allowed to switch back to their originally requested location.³⁵⁰
- The Commission must strenuously enforce milestone obligations.³⁵¹
- Applicants must provide evidence of a \$10 million bond, payable to the U.S. Treasury, upon failure to meet a milestone or revocation of a license for any other reason.³⁵²
- Applicants can transfer licenses and applications at cost.³⁵³
- The Commission must act on applications within 90 days.³⁵⁴

152. SES Americom argues that limiting the first-come, first-served proposal to "established bands" would not address any of the concerns that commenters have raised about potential for speculation in or the legal basis for a first-come, first-served procedure.³⁵⁵ SES Americom also questions whether a satellite service should be considered "established" as soon as the Commission adopts service rules and frequency allocations.³⁵⁶ SES Americom criticizes Intelsat's partial fungibility proposal because it could lead to multiple applicants switching among queues on an almost constant basis.³⁵⁷

153. *Discussion.* In this Order, we have adopted portions of Intelsat's modified first-come, first-served approach. As Intelsat suggests, we have adopted a first-come, first-served approach for GSO-like systems but not for NGSO-like systems, where we agree that a band-

³⁴⁸ Intelsat Comments at 3.

³⁴⁹ Intelsat Comments at 9-10.

³⁵⁰ Intelsat Comments at 15-17.

³⁵¹ Intelsat Comments at 19-21.

³⁵² Intelsat Comments at 10-12.

³⁵³ Intelsat Comments at 17-19.

³⁵⁴ Intelsat Comments at 14-15. *See also* Teledesic Reply at 24 (acting on applications within 90 to 180 days would deter speculation).

³⁵⁵ SES Americom Reply at 14-15.

³⁵⁶ SES Americom Reply at 15-16.

³⁵⁷ SES Americom Reply at 17.

segmentation framework is more appropriate. We also agree that licensees should be able to freely transfer licenses and that we should strictly enforce milestone conditions.

154. Nevertheless, limiting these reforms to "established" frequency bands would make them inapplicable to the vast majority of future satellite applications. As we explained previously, we find that the first-come, first-served framework, as adopted here, will allow us to act on applications involving "new" frequency bands efficiently and effectively. Nor will we adopt Intelsat's proposal to permit second-in-line applicants to switch to a queue for another GSO orbital location, because we decided above not to maintain separate queues for each orbit location.³⁵⁸ Moreover, to the extent that Intelsat is in effect proposing that we allow applicants to make major amendments to their applications to state new orbit locations without moving to the end of the queue, we reject this proposal. It would unreasonably encourage speculation to allow applicants to select any orbit location available at the time their application reaches the head of the queue, rather than submitting a substantially complete satellite application specifying an orbit location. For this reason, this would be an unreasonable departure from the Commission's first-come, first-served procedure for broadcast licenses.³⁵⁹ Finally, we consider below Intelsat's proposed bond-posting requirement and mandatory electronic filing requirement.

G. Fungibility Policy

155. *Background.* In Section V. of this Order above, we considered many proposals from the *Notice* for revising the current processing round procedure. Another revision proposed in the *Notice* was to eliminate the fungibility policy.³⁶⁰ In the *Notice*, the Commission noted that it has historically maintained a policy of treating GSO orbital locations as fungible in the context of processing rounds in the fixed satellite service as one means of resolving mutually exclusive situations in those processing rounds.³⁶¹ The fungibility policy is applied where it is not possible to assign to each participant in a processing round the exact orbital location that is requested. In those situations, rather than institute lengthy proceedings to decide which of several applicants should be assigned to a requested location, we assign some other GSO location to that applicant.³⁶²

156. The Commission proposed to streamline processing rounds by eliminating the fungibility policy.³⁶³ We observed that working to find a way to accommodate each applicant as

³⁵⁸ Section VI.E.1.a. Because we do not adopt Intelsat's proposals as a single package, we need not determine whether Intelsat's proposals would have enabled us to act on satellite applications within 90 days as Intelsat claims. *See* Intelsat Comments at 14-15.

³⁵⁹ *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 31), *cited in Space Station Reform NPRM*, 17 FCC Rcd at 3866 (para. 55).

³⁶⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3874-75 (paras. 79-81).

³⁶¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 79), *citing* Assignment of Orbital Locations to Space Stations in the Domestic Fixed Satellite Service, *Memorandum Opinion and Order*, 84 FCC 2d 584, 601 (para. 45) (1981) (*1980 Assignment Order*); *Separate Systems Order*, 101 FCC 2d at 1176 n.168.

³⁶² *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 79).

³⁶³ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 80).

much as possible can substantially increase the time needed to complete a processing round.³⁶⁴ We further observed that the backlog in publishing ITU submissions makes this accommodation more difficult, because it is difficult to determine whether we are assigning an applicant to an orbit location that has been encumbered by an ITU filing from another Administration.³⁶⁵ We reasoned that relying on applicants to take responsibility for requesting orbit locations that are not encumbered by another Administration's ITU submission would enable us to complete processing rounds more quickly.³⁶⁶ Accordingly, we proposed eliminating the fungibility policy because it would eliminate the need to make these determinations.³⁶⁷

157. *Pleadings.* Several commenters claim that the fungibility policy is necessary to resolve mutually exclusive situations in processing rounds.³⁶⁸ SIA and PanAmSat disagree with the Commission that the ITU's backlog in publishing ITU submissions warrants eliminating the fungibility policy, because the ITU maintains a database of filed but unpublished ITU submissions.³⁶⁹ SIA also asserts that the Commission has not in the past delayed issuing licenses until the ITU has assigned the orbit location to a United States licensee.³⁷⁰ Inmarsat maintains that eliminating the fungibility policy would preclude the Commission from reassigning a satellite operator to a new location in cases involving coordination of U.S.-licensed and non-U.S.-licensed satellite systems.³⁷¹ Alternatively, Teledesic recommends eliminating the fungibility policy because GSO orbital locations are not in fact fungible in the fixed satellite service.³⁷²

158. *Discussion.* Under the procedures we adopt here, the fungibility policy is unnecessary because it will no longer apply to any satellite applications. As we explained in the *Notice*, the fungibility policy applies only to GSO-like satellite applications considered in processing rounds.³⁷³ Thus, under our new procedures, the fungibility policy cannot be applied to GSO-like applications because we will consider those applications in a first-come, first-served procedure, not in processing rounds. We assume that applicants are willing to be licensed for the orbital locations for which they apply, and that they will either take the location subject to any encumbrances such as ITU priority, and at their own risk, or will reject the license. Moreover, the fungibility policy has never been applicable to NGSO-like satellite applications. The

³⁶⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 80).

³⁶⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 80).

³⁶⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 80).

³⁶⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 80).

³⁶⁸ SIA Space Station Comments at 27; PanAmSat Space Station Comments at 11; Hughes Space Station Comments at 48-49; SES Americom Space Station Reply at 10.

³⁶⁹ SIA Space Station Comments at 27; PanAmSat Space Station Comments at 11-12.

³⁷⁰ SIA Space Station Comments at 11, 27.

³⁷¹ Inmarsat Space Station Comments at 8-11, *citing* Assignment of Orbital Locations to Space Stations in the Fixed-Satellite Service, *Memorandum Opinion and Order*, 13 FCC Rcd 13863 (Int'l Bur. 1998).

³⁷² Teledesic Space Station Comments at 33-34.

³⁷³ *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 80).

fungibility policy applies to GSO orbital locations, not NGSO orbital planes. Finally, the fungibility policy is unnecessary for GSO MSS satellite applications, which are "NGSO-like," and so they will be considered pursuant to the modified processing round approach. Such satellites must operate in different frequency band segments to avoid becoming mutually exclusive, and therefore may be essentially collocated in the GSO orbit, which in turn obviates the need for the fungibility policy.

159. We disagree with Inmarsat that elimination of the fungibility policy would preclude us from considering licensees' modification applications requesting relocation of a satellite. By definition, modification applications request revisions to a license *after* it is issued. Under the fungibility policy, the Commission treated FSS orbital locations as fungible as one means of resolving mutually exclusive situations *in the context of processing rounds*.³⁷⁴ In other words, the fungibility policy applies only at the time licenses are issued in a processing round context, not afterwards. Thus, eliminating the fungibility policy will have no effect on future modification applications.

VII. OTHER ISSUES

A. Background

160. The Commission invited comment on several proposals intended to make the satellite application process more efficient, and thus help speed provision of service to the public, regardless of whether we adopt the first-come, first-served option or modify the current procedure.³⁷⁵ We discuss each of those proposals below.

B. Financial Qualifications

1. Eliminating the Financial Qualification Requirement

161. *Background.* Applicants for satellite licenses must now show generally that they have the financial resources to construct and launch a satellite or satellite constellation, and to operate it for one year.³⁷⁶ In the *Notice*, the Commission observed that this requirement and its milestone requirements serve very similar purposes.³⁷⁷ The Commission explained that it examines financial qualifications to help ensure that licensees have the financial resources to proceed with their plans so that service is promptly made available to users.³⁷⁸ Similarly,

³⁷⁴ See *Space Station Reform NPRM*, 17 FCC Rcd at 3874 (para. 79), citing 1980 *Assignment Order*, 84 FCC 2d at 601 (para. 45); *Separate Systems Order*, 101 FCC 2d at 1176 n.168.

³⁷⁵ See *Space Station Reform NPRM*, 17 FCC Rcd at 3880 (para. 98).

³⁷⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3880 (para. 100), citing 47 C.F.R. § 25.114(c)(13) and rules cited therein.

³⁷⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 102).

³⁷⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3880 (para. 100), citing, e.g., Amendment to the Commission's Rules to Allocate Spectrum for, and to Establish Other Rules and Policies Pertaining to, a Radiodetermination Satellite Service, *Second Report and Order*, Gen. Docket No. 84-689, 104 FCC 2d 650, 663 (para. 23) (1986) (*RDSS Second Report and Order*); Norris Satellite Communications, Inc., *Order and Authorization*, 7 FCC Rcd 4289, 4291 (para. 11) (1992).

milestone deadlines ensure that licensees construct and launch their systems in a timely manner.³⁷⁹ Accordingly, the Commission invited comment on eliminating the financial qualification requirements currently in its rules, and relying exclusively on our milestone policy to ensure that licensees provide service in a timely fashion.³⁸⁰

162. *Discussion.* Several commenters oppose eliminating the financial showing and stress that it is necessary to ensure that prospective licensees are able to construct their proposed satellite systems.³⁸¹ Teledesic, however, supports the proposal to eliminate financial qualification requirements and agrees with the Commission that milestones serve many of the same purposes.³⁸² Teledesic argues further that there have been several cases of licensees who failed to launch their satellites despite meeting the financial qualification requirements, and licensees who launched their satellites based on attracting investment with a sound business plan rather than relying on assets available at the time an application is filed, as our financial qualification requirements primarily measure.³⁸³

163. Some parties suggest relaxing the financial qualification requirement rather than eliminating it. PanAmSat specifically proposes that the Commission require applicants to demonstrate financing for a substantial portion (*e.g.*, 30 percent) of their costs when they file or require applicants to demonstrate financing for an additional portion of costs after a later specified period.³⁸⁴ Additionally, PanAmSat proposes that the Commission refrain from requiring a financial showing for new services or frequencies until the process for allocating frequencies internationally and domestically has been completed and the Commission has adopted service rules.³⁸⁵ SIA and Inmarsat also argue that the Commission should not eliminate its financial qualification requirement, but instead should revise the requirement to accommodate new entrants in the industry.³⁸⁶

³⁷⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 101), *citing First Columbia Milestone Order*, 15 FCC Rcd at 15571 (para. 11); National Exchange Satellite, Inc., *Memorandum Opinion and Order*, 7 FCC Rcd 1990, 1991 (para. 8) (Com. Car. Bur. 1992) (*Nexsat Order*), *citing MCI Communications Corporation, Memorandum Opinion and Order*, 2 FCC Rcd 233 (1987) (*MCI Order*).

³⁸⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 102).

³⁸¹ Hughes Comments at 43-45; Boeing Comments at 10-12; Intelsat Comments at 10-12; SES Americom Reply at 12.

³⁸² Teledesic Comments at 41-42.

³⁸³ According to Teledesic, only 11 of 19 participants in the 1983 C and Ku-band processing round launched their satellites, 3 of 23 participants in the 1985 processing round, and 11 of 19 in the 1988 processing round. Teledesic Reply at 26-28. *See also* Application of TRW, Inc., for Authority to Construct, Launch, and Operate a Low Earth Orbit Satellite System in the 1610-1626.5 MHz/2483.5-2500 MH Band, *Order and Authorization*, 10 FCC Rcd 2263, 2264 (para. 6) (Int'l Bur. 1995), *cited in* Teledesic Reply at 27.

³⁸⁴ PanAmSat Comments at 15-16.

³⁸⁵ PanAmSat Comments at 15-16.

³⁸⁶ SIA Comments at 34; Inmarsat Comments at 11-12.

164. We decide to eliminate the financial qualification requirement currently in the Commission's rules. Our current financial qualification requirements have not proven to be determinative of whether a licensee implements its system. Our experience has shown that financially qualified licensees have chosen not to go forward, while other licensees who could not have met the requirement but were awarded a license because we waived the requirement, have successfully built and launched systems. We note that we have decided not to apply the current financial qualification requirements to mobile satellite service (MSS) operators in the 2 GHz band, in part because strict enforcement of milestone requirements would ensure timely system construction and service deployment,³⁸⁷ and have often granted waivers of this rule in cases where all the pending satellite license applications could be accommodated. We conclude that strictly enforcing our milestone schedule provides more certainty that systems will be timely built, while allowing smaller or start-up companies an opportunity to succeed or fail in the marketplace. Our milestone policy will also allow us to reclaim unused spectrum in a timely manner, and to assign that spectrum immediately to those licensees that are proceeding (in the NGSO-like context) or quickly to new applicants (in the GSO-like context).

165. We also decide not to revise the current financial qualification requirement as commenters propose. By eliminating the requirement, we facilitate new entry more effectively than the relaxed financial qualifications would. In addition, relaxing the financial qualification requirement would not make it a better predictor of whether the licensee will construct its satellite system in a timely manner. Instead, we adopt a new financial qualification requirement proposed by commenters, posting bonds, as set forth below.

2. Posting of Bonds

166. *Background.* In the *Notice*, the Commission invited interested parties to suggest alternatives to its proposal to eliminate the current financial qualification requirement,³⁸⁸ and in general to recommend other ways to reform the satellite licensing process.³⁸⁹ Intelsat argues that the existing policy is insufficient to deter the filing of frivolous applications.³⁹⁰ Intelsat proposes that the Commission require applicants to execute a bond in the amount of \$10 million, to be included in their applications. Those bonds would be payable to the U.S. Treasury upon license revocation if the licensee has not yet incurred ten percent of their costs at the time the license is revoked.³⁹¹ Intelsat argues that a \$10 million bond would be sufficient to discourage speculative applications, but would not discourage legitimate applicants because the bond would be payable only if the licensee does not make a good faith effort to proceed with construction of its satellite.³⁹² Intelsat claims that the Commission has previously adopted a bond requirement in

³⁸⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 103), *citing 2 GHz Order*, 15 FCC Rcd at 16150-51 (para. 48).

³⁸⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 108).

³⁸⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3897 (para. 147).

³⁹⁰ Intelsat Comments at 10-12.

³⁹¹ Intelsat Comments at 10-11.

³⁹² Intelsat Comments at 11-12.

another service.³⁹³ SES Americom argues that a \$10 million bond would unreasonably discourage new entry and innovative new services.³⁹⁴ PanAmSat also opposes a bond requirement as excessive.³⁹⁵

167. *Discussion.* We adopt Intelsat's proposal, as modified below, and replace our existing financial qualification requirements with a bond requirement. By requiring satellite licensees to make a financial commitment to construct and launch their satellites, we help deter speculative satellite applications, and help expedite provision of service to the public. Moreover, replacing our current financial qualification requirement with a bond requirement will result in the financial community determining whether the licensee is likely to construct and launch its satellite system. Thus, financial qualifications will become a market-driven rather than a regulatory determination. We will apply this bond requirement to new satellite licensees only, not replacement satellites. Once a licensee has begun to provide service, we are confident that its replacement satellite application will be intended to continue service, and would not be filed for speculative purposes. The bond will be payable upon missing a milestone without providing an adequate justification for extending the milestone. Licensees will be allowed to reduce the amount of the bond upon meeting each milestone.

168. We are concerned, however, by Intelsat's proposed bond amount of \$10 million. The bond amount should help deter speculation, without deterring legitimate satellite applications. While Intelsat argues that a \$10 million bond requirement meets these standards, SES Americom and PanAmSat disagree, and we do not have an adequate basis in the record at this time for resolving this issue. Accordingly, on an interim basis, we will set the required bond amount at \$5 million for GSO-like satellite licensees, and \$7.5 million for NGSO-like satellite system licensees. A higher amount for NGSO-like satellite system licensees is reasonable because a greater commitment is required to implement a multiple-satellite system. Below, we adopt a Further Notice of Proposed Rulemaking inviting parties to comment on a long-term bond requirement.

169. Furthermore, to the extent that SES Americom is correct that a bond requirement may discourage legitimate satellite operators from applying, we do not want this to affect public safety services. Accordingly, we will consider requests for complete or partial waivers of the bond requirement for satellite operators proposing satellites designed to provide public safety services. The Commission's rules provide for waivers of any rule, provided that the petitioner can show good cause for its waiver request.³⁹⁶ We would consider things such as public safety intent in deciding whether a waiver is warranted.

³⁹³ Intelsat Reply at 4-6, *citing* Amendment of the Commission's Rules to Provide Channel Exclusivity to Qualified Private Paging Systems at 929-930 MHz, *Report and Order*, PR Docket No. 93-35, 8 FCC Rcd 8318, 8325-27 (paras. 22-23) (1993) (*Private Paging Exclusivity Order*). In that Order, the Commission adopted a bond requirement for paging companies seeking an extension of their milestones.

³⁹⁴ SES Americom Reply at 16-17.

³⁹⁵ PanAmSat Reply at 3.

³⁹⁶ 47 C.F.R. § 1.3. For more on the meaning of "good cause" for purposes of waivers of Commission rules, see *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969) (*WAIT Radio*); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1166 (D.C. Cir. 1990) (*Northeast Cellular*).

170. As proposed by Intelsat, and as the Commission did in the *Private Paging Exclusivity Order*, we require licensees to execute performance bonds payable to the U.S. Treasury.³⁹⁷ We require a licensee to obtain this bond within 30 days of grant of their license, as a condition of its license. Otherwise, its license will be null and void. Thus, the bond requirement is in effect an additional milestone requirement. We intend this bond requirement to provide assurance that the licensee is fully committed at the time its license is granted to construct its satellite facilities, not committed merely to spend up to ten percent of the construction costs of the satellite. Therefore, we will not adopt Intelsat's proposal to make the bond payable only if the licensee has not incurred ten percent of its costs at the time the license is revoked.³⁹⁸ Instead, the bond will be payable upon failure to meet any milestone, without providing adequate justification for extending that milestone. The bond would not be payable if the licensee missed a milestone because of circumstances beyond its control that warrant a milestone extension. By making the bond payable upon failure to meet any milestone based on circumstances within the licensee's control, we require licensees to commit to construct and launch its satellite system, and so we further strengthen our protections against speculation and warehousing.

171. If a licensee transfers or assigns its license, the purchaser of the license will be required to assume the bond. The bond will also be payable if the licensee surrenders its license voluntarily before a milestone date. Again, the purpose of the bond is to require the licensee to commit at the time the license is granted to construct and launch a satellite system. The purpose of the commitment is to ensure that the service is provided to the public as soon as possible. Allowing a licensee to avoid paying the bond by merely selling or surrendering its license substantially reduces the licensee's commitment to construct and launch the satellite, and so increases the likelihood that service to the public would be delayed until the license is surrendered and we reassign the license to another party.

172. In the *Private Paging Exclusivity Order*, the Commission allowed paging licensees to reduce the outstanding principle on their bonds as they progressed on the construction of their networks.³⁹⁹ Intelsat did not include this in its proposal, however.⁴⁰⁰ We adopt a similar provision in this Order. Below, we revise our milestone requirements to establish a total of five milestones for NGSO-like licensees, and four for GSO-like licensees.⁴⁰¹ Accordingly, NGSO-

³⁹⁷ *Private Paging Exclusivity Order*, 8 FCC Rcd at 8326 n.45; Intelsat Comments at 10-11. The surety on the bond must be a surety company deemed acceptable within the meaning of 31 U.S.C. § 9304, *et seq.* This requirement is also consistent with the *Private Paging Exclusivity Order*, 8 FCC Rcd at 8326 n.45.

³⁹⁸ Intelsat Comments at 10-11. Further, we reject proposals below for basing milestones on payment of certain percentages of the construction cost of a satellite system, because it would encourage applicants to project unreasonably low satellite costs. Section VII.C.12. The same reasoning weighs against Intelsat's proposal to make the bond payable upon failure to spend ten percent on the construction of the satellite.

³⁹⁹ *Private Paging Exclusivity Order*, 8 FCC Rcd at 8326-27 (para. 23).

⁴⁰⁰ Intelsat Comments at 10-12.

⁴⁰¹ The NGSO-like milestones are: (1) contract execution; (2) critical design review; (3) commencement of construction; (4) launch; and (5) bring entire system into operation. The GSO-like milestones are (1) contract execution; (2) critical design review; (3) commencement of construction; and (4) launch. See Section VII.C.2. below.

like licensees will be allowed to reduce the amount of the bond by 20 percent of the original bond amount upon meeting each milestone after they post their bonds, and GSO-like licensees will be allowed to reduce the amount of the bond by 25 percent of the original bond amount upon meeting each milestone after they post their bonds.

C. Milestone Requirements

1. Background

173. Milestones are intended to ensure that licensees provide service to the public in a timely manner, to prevent warehousing of scarce orbit and spectrum resources. Such warehousing could hinder the availability of services to the public at the earliest possible date by blocking entry by other entities willing and able to proceed immediately with the construction and launch of their satellite systems.⁴⁰² Currently, we require licensees to execute a construction contract within one year of the license grant, and to launch and begin operation of all of their authorized satellites within five to six years, depending on the type of satellite. We include these requirements as conditions in satellite licenses.

174. In the *Notice*, we proposed to adopt generic milestone requirements for all satellite services. We also invited comment on adding a milestone for completion of Critical Design Review (CDR), or in other words, completion of the design phase of implementation and commencement of physical construction.⁴⁰³ We noted that we adopted this requirement for mobile satellite service (MSS) operators in the 2 GHz band.⁴⁰⁴ In addition, the Commission invited comment on whether we should apply the milestones adopted in the *2 GHz Order* to all satellite services,⁴⁰⁵ including a "Commence Construction" milestone for beginning the physical construction of the satellite.⁴⁰⁶

	NGSO	GSO
Contract Execution ⁴⁰⁷	1	1
CDR	2	2

⁴⁰² *PanAmSat Ka-Band License Revocation Review Order*, 16 FCC Rcd at 11537-38 (para. 12), *citing Nexsat Order*, 7 FCC Rcd at 1991 (para. 8); *MCI Order*, 2 FCC Rcd at 233 (para. 5); *First Columbia Milestone Order*, 15 FCC Rcd at 15571 (para. 11).

⁴⁰³ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 103). We discuss these milestones in more detail in this Order below.

⁴⁰⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 103), *citing 2 GHz Order*, 15 FCC Rcd at 16178-79 (para. 108).

⁴⁰⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 103), *citing 2 GHz Order*, 15 FCC Rcd at 16177-78 (para. 106).

⁴⁰⁶ *See 2 GHz Order*, 15 FCC Rcd at 16177-78 (para. 106).

⁴⁰⁷ In the past, we have used the term "construction commencement" for the first milestone, to mean executing a non-contingent construction contract. In this Order, we adopt the term "contract execution" for the first milestone, and define "construction commencement" to mean the beginning of the physical construction of a satellite.

Commence Construction	2.5	3
Launch ⁴⁰⁸	3.5	
Bring Entire System Into Operation	6	
Launch and Operate		5

(Milestones are stated in number of years after authorization.)

Further, we invited comment on whether we should adopt interim or additional milestone requirements.⁴⁰⁹

175. We adopt the milestones proposed in the *Notice*, in addition to the 30-day bond-posting requirement adopted above. Milestones remain an important tool to prevent warehousing of scarce orbit and spectrum resources. In addition, strict enforcement of milestones will help safeguard against speculative satellite applications, because the value of the license decreases as the contract execution milestone approaches.⁴¹⁰ Moreover, licensees must work with the financial community to find the financing necessary to enter a contract to construct a satellite system within one year of the grant of the license. Therefore, licensees must develop a viable business plan to obtain that financing, and so milestones introduce a market-based mechanism into our licensing process. Our reasons for adopting the milestones proposed in the *Notice* are explained in more detail below.

2. General Comments on Milestone Proposals

176. *Background.* Teledesic proposes that, rather than relying solely on "generic" milestones, the Commission should develop milestones for each service and licensee.⁴¹¹ SES Americom opposes Teledesic's proposal, claiming it could create uncertainty and the potential for litigation.⁴¹² Teledesic also opposes the Commission imposing stricter milestone requirements on NGSO than on GSO satellites.⁴¹³

177. *Discussion.* We adopt our proposal to establish generic milestones in our rules. As an initial matter, although we have adopted milestone schedules on a case-by-case basis in the past, we have generally adopted contract execution and launch milestones consistent with those

⁴⁰⁸ Non-geostationary satellite systems must launch their first two satellites within 3.5 years of authorization. Geostationary satellite systems must launch their first satellite within 5 years of authorization. *2 GHz Order*, 15 FCC Rcd at 16177-78 (para. 106).

⁴⁰⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3882 (para. 104).

⁴¹⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 116).

⁴¹¹ Teledesic Comments at 43-44.

⁴¹² SES Americom Reply at 13.

⁴¹³ Teledesic Comments at 43.

previously used, which track those we proposed in the *Notice*.⁴¹⁴ Moreover, the milestone schedule we include in each license has generally not varied from license to license. Thus, codifying generic milestones is not a great departure from our current practice. Alternatively, Teledesic's proposal to adopt different milestones for each service would be a departure from current practice, and Teledesic does not provide an adequate justification for such a departure.

178. We disagree with Teledesic that longer milestone deadlines for NGSO licenses are warranted. As an initial matter, both NGSO licensees and GSO licensees are required to meet the same milestone schedule, except for commencement of physical construction and launch. Therefore, the NGSO milestone schedule is not substantially stricter than the GSO schedule. Further, the NGSO milestones that we proposed in the *Notice* are consistent with those the Commission adopted for NGSO licenses in the *2 GHz Proceeding*,⁴¹⁵ which are similar to the schedules established for previously licensed NGSO satellite systems.⁴¹⁶ Moreover, the Commission observed that GSO satellite licensees need a longer period in which to launch their first satellite because individual GSO satellites may take more time to construct than an NGSO satellite within a larger constellation of technically identical satellites.⁴¹⁷ Thus, we see no reason to extend the milestones for other NGSO licenses in this proceeding.

3. Contract Execution Milestone

179. *Background.* CTIA recommends setting the contract execution milestone at nine months after the license is issued, rather than one year.⁴¹⁸ SES Americom replies that nine months does not take into account the need to mesh satellite design with business plans.⁴¹⁹

180. *Discussion.* We will not adopt CTIA's proposal to set the contract execution milestone at nine months. The Commission has historically set this milestone at one year after the license is granted. Our experience has shown that this time period represents a reasonable balance between ensuring that licensees are moving forward with their business plans and allowing licensees adequate time to negotiate satellite construction contracts with manufacturers. CTIA has not provided sufficient reason at this time to question the reasonableness of this balance. We may revisit this issue in the future, however, if our experience shows that a more stringent contract execution milestone is warranted.

⁴¹⁴ PanAmSat Licensee Corp., *Memorandum Opinion and Order, Order and Authorization*, 13 FCC Rcd 1405 (Int'l Bur. 1997) (*PanAmSat Second Round Ka-band Authorization Order*).

⁴¹⁵ See *2 GHz Order*, 15 FCC Rcd at 16177 (para. 106).

⁴¹⁶ See *2 GHz NPRM*, 14 FCC Rcd at 4881 (para. 85) (discussing milestone schedules for Big LEO and NVNG MSS systems).

⁴¹⁷ *2 GHz NPRM*, 14 FCC Rcd at 4881-82 (para. 85).

⁴¹⁸ CTIA Comments at 5.

⁴¹⁹ SES Americom Reply at 22.

4. Standard for Determining Compliance with Contract Execution Milestone Requirement

181. *Background.* The Commission invited comment on several issues related to enforcement of its milestones.⁴²⁰ First, the Commission explained that the test it now uses for determining whether a licensee has met its contract execution milestone is whether the licensee has a binding, non-contingent satellite construction contract with the manufacturer.⁴²¹ We have defined "non-contingent contract" as one where there will be neither significant delays between the execution of the contract and the actual commencement of construction, nor conditions precedent to construction.⁴²² The Commission noted that this test can require interpretation of construction contracts, and so can take time to administer, and can raise issues regarding requests for confidential treatment of construction contracts.⁴²³ The Commission invited proposals for streamlining our enforcement of contract execution milestones.⁴²⁴ It also invited proposals for bright-line, easily administered tests for other milestones.⁴²⁵

182. *Pleadings.* Teledesic asserts that basing the contract execution milestone on a "non-contingent contract" is problematic because all contracts include some contingencies.⁴²⁶ SES Americom replies that the concept of "non-contingent contract" is not as difficult as Teledesic asserts.⁴²⁷

183. SIA criticizes the Commission for alleged delay in enforcing contract execution milestones in the past, and recommends establishing fixed procedures for contract execution inquiries and a set time limit for the submission of copies of non-contingent satellite construction contracts.⁴²⁸ Similarly, PanAmSat suggests requiring that licensees submit their construction

⁴²⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3882-83 (paras. 105-06).

⁴²¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3882-83 (para. 105), *citing* PanAmSat Licensee Corp. *Memorandum Opinion and Order*, 15 FCC Rcd 18720, 18723 (para. 9) (Int'l Bur. 2001) (*PanAmSat Ka-band License Cancellation Order*).

⁴²² *Space Station Reform NPRM*, 17 FCC Rcd at 3882-83 (para. 105), *citing* Norris Satellite Communications, Inc., *Memorandum Opinion and Order*, 12 FCC Rcd 22299, 22303-04 (para. 9) (1997) (*Norris Review Order*), *PanAmSat Ka-band License Cancellation Review Order*, 16 FCC Rcd at 11539 (para. 16).

⁴²³ *Space Station Reform NPRM*, 17 FCC Rcd at 3882-83 (para. 105).

⁴²⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3882-83 (para. 105).

⁴²⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3882-83 (para. 105).

⁴²⁶ Teledesic Comments at 42-43.

⁴²⁷ SES Americom Reply at 12-13, *citing* PanAmSat Licensee Corp. Application for Authority to Construct, Launch, and Operate a Ka-Band Communications Satellite System in the Fixed-Satellite Service at Orbital Locations 58° W.L. and 125° W.L., *Memorandum Opinion and Order*, 15 FCC Rcd 18720 (Int'l Bur. 2000), *aff'd* 16 FCC Rcd 11534 (2001).

⁴²⁸ SIA Comments at 30-32.

contracts, rather than simply certifying that they have entered into non-contingent contracts.⁴²⁹ Intelsat proposes that the Commission require licensees to certify under penalty of perjury that they have entered into a binding, non-contingent construction contract by the milestone date, or provide a copy of the contract.⁴³⁰ Teledesic proposes that, instead of requiring licensees to submit confidential corporate information, the Commission should require licensees to certify that they have met each of their milestones.⁴³¹

184. *Discussion.* As an initial matter, we retain our practice of requiring a "non-contingent contract" to demonstrate compliance with the one-year contract execution milestone. This does not mean that the contract cannot contain *any* contingencies. Rather, a "non-contingent contract" is one that allows neither significant delays between the execution of the contract and the actual commencement of construction, nor conditions precedent to construction.⁴³² We have also held that a sufficient contract is one that contains no unresolved contingencies that could preclude construction of the satellite.⁴³³ In addition, a contract that allows the licensee to cancel construction of the satellite without significant penalty is not sufficient to meet the construction commencement milestone.⁴³⁴

185. We adopt SIA's and PanAmSat's proposal to require satellite licensees to submit their contracts to the Commission on or before the date of the contract execution milestone. In particular, by placing this requirement in our rules, we will eliminate the need to send a letter to licensees requesting them to submit their contracts, and so we will be able to begin review of those contracts sooner. We have found that the contracts are needed to allow us to determine whether the licensee has met the milestone. The licensee's certification has not always proven to be dispositive in the past.⁴³⁵

⁴²⁹ PanAmSat Comments at 45-46.

⁴³⁰ Intelsat Comments at 20.

⁴³¹ Teledesic Comments at 42-43.

⁴³² *Space Station Reform NPRM*, 17 FCC Rcd at 3882 n.142, *citing* Norris Satellite Communications, Inc., *Memorandum Opinion and Order*, 12 FCC Rcd 22299, 22303-04 (para. 9) (1997) (*Norris Review Order*), *PanAmSat Ka-band License Cancellation Review Order*, 16 FCC Rcd at 11539 (para. 16).

⁴³³ *Tempo Enterprises, Inc.*, *Memorandum Opinion and Order*, 1 FCC Rcd 20, 21 (para. 7) (1986) (*Tempo Order*). Although the Commission used this standard to review DBS due diligence requirements, it is also applicable to FSS contract execution determinations.

⁴³⁴ Furthermore, a contract to construct only part of a satellite system, by itself, cannot satisfy the construction commencement milestone. In cases where a licensee chooses not to construct the satellite system as licensed, we expect the licensee to file a modification application prior to the date of the construction commencement milestone, rather than simply submitting a contract to construct a different satellite system.

⁴³⁵ *See* Mobile Communications Holdings, Inc., *Memorandum Opinion and Order*, 17 FCC Rcd 11898, 11901 (paras. 9-10) (Int'l. Bur., Sat. Div., 2002). In this proceeding, the licensee was required to commence construction of the first two satellites in a 16-satelite Big LEO system by July 1998, and the remaining satellites by July 2000. The licensee asserted that its contract to construct the first two satellites together with testing plans for the remaining 14 satellites constituted a non-contingent construction contract for all 16 satellites. *See also* Morning Star Satellite Company, L.L.C., *Memorandum Opinion and Order*, 15 FCC Rcd 11350, 11352 (para. 6) (Int'l. Bur. 2000). In this Order, the licensee's president submitted an

5. Confidential Information

186. Teledesic opposes submission of construction contracts in part because it claims that the Commission's procedures for protection of confidential commercial information in those contracts, including our procedures for protective orders, are inadequate.⁴³⁶ Teledesic does not make any concrete proposals for improving our procedures, nor does it explain how any greater protection could be extended to construction contracts within the bounds of the Freedom of Information Act (FOIA).⁴³⁷ These comments lack specificity and do not provide a reasonable basis for rejecting SIA's proposal to require submission of construction contracts. As noted, we cannot necessarily rely on a licensee's assessment of its contract as proof that it has met the required milestone.

187. We take this opportunity, however, to explain generally how we plan to treat requests for confidential treatment of satellite construction contracts on a going-forward basis. If a licensee seeks confidential treatment of its construction contract, we will require it to submit an unredacted version of their contracts, and as well as a redacted version to be made publicly available. In addition, we will expect it to provide all the information needed to justify that request for confidentiality, including the information specified in Section 0.459(b) of the Commission's rules.⁴³⁸ Generally, we have recognized that specific dollar amounts and some of the detailed technical specifications of satellites warrant confidential treatment.⁴³⁹ We anticipate continuing that policy.

6. Critical Design Review

188. *Background.* SIA questions the benefits of adding a milestone date for CDR.⁴⁴⁰ If the Commission decides to adopt such a milestone, SIA and Intelsat encourage the Commission to allow licensees to develop their own CDR deadlines, based upon the licensee's submission of a reasonable CDR completion date.⁴⁴¹ PanAmSat generally opposes the proposal to add a new milestone for CDR.⁴⁴²

affidavit representing that its construction contract was sufficient to meet the construction commencement milestone, even though the contract contained no terms governing construction schedules, payment schedules, or any other evidence of a binding commitment to build a satellite. *See also* EchoStar Satellite Corporation, *Memorandum Opinion and Order*, 17 FCC Rcd 8827, 8829 (para. 7) (Int'l. Bur. 2002) (documents submitted by licensee purporting to show compliance with Ka-band milestone did not include any commitment to construct a satellite with Ka-band capacity).

⁴³⁶ Teledesic Comments at 42-43.

⁴³⁷ 5 U.S.C. § 552.

⁴³⁸ 47 C.F.R. § 0.459(b).

⁴³⁹ We note, however, that certain technical details are required to be included in an application for a Commission space station license. *See* 47 C.F.R. § 25.114(c). We do not believe that information of this general nature should be routinely withheld from public inspection.

⁴⁴⁰ SIA Comments at 32-33.

⁴⁴¹ SIA Comments at 32-33; Intelsat Comments at 21.

⁴⁴² PanAmSat Comments at 17-18.

189. *Discussion.* We conclude that we should apply the milestone schedule we adopted for licensees in the 2 GHz proceeding, including the CDR milestone requirement, to all satellite licensees on a going-forward basis. Without a CDR milestone, there would be an unacceptable amount of time for scarce orbit and spectrum resources to lie fallow in cases where the existing licenses is not proceeding and the spectrum could be reassigned to an entity willing and able to construct a satellite system in a timely manner.⁴⁴³ The 2 GHz proceeding concluded that a CDR milestone will aid us in determining whether licensees are taking immediate, concrete steps toward system implementation after meeting the first milestone, and allows us to identify any failure in system progress.⁴⁴⁴ We have not found anything in our experience with 2 GHz licensees that would weigh against applying that milestone schedule to all satellite licensees.

190. Further, we will not set CDR milestones on a case-by-case basis in individual licenses. Making those determinations on a case-by-case basis would add to the time needed to process satellite applications. Furthermore, neither Intelsat nor SIA explain why licensees should be given more flexibility than is included in the CDR milestone requirement we adopt here. Specifically, nothing precludes a licensee from meeting the CDR milestone earlier than the deadline we adopt in this Order, and we know of no reason why a licensee that is committed to constructing and launching its satellite system would not be able to commit to completing the spacecraft CDR within the time provided in the milestone schedule.

191. In the 2 GHz Order, we defined "CDR" as the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase starts.⁴⁴⁵ Generally, well before the CDR stage, the licensee should not anticipate making any modifications to its spacecraft design that would require Commission approval, absent unusual circumstances. We will not prescribe a particular method for licensees to show that they have met their milestone, but emphasize that licensees will bear the burden of demonstrating that they have met this milestone. Evidence of compliance with this milestone may include: (1) evidence of a large payment of money, required by most construction contracts at the time of the spacecraft CDR; (2) affidavits from independent manufacturers; and (3) evidence that the licensee has ordered all the long lead items needed to begin physical construction of the spacecraft. Finally, it may be necessary or appropriate to supplement the record on occasion. In such cases, the Commission retains discretion to require licensees to provide further information, or to conduct physical inspections.

⁴⁴³ See 2 GHz Order, 15 FCC Rcd at 16179 (para. 108) (noting concerns about three-year gap between first and second milestones). See also National Exchange Satellite, Inc., *Memorandum Opinion and Order*, 7 FCC Rcd 1990, 1991 (para. 8) (Com. Car. Bur. 1992) (*Nexsat Order*); MCI Communications Corporation, *Memorandum Opinion and Order*, 2 FCC Rcd 233 (1987) (*MCI Order*); Columbia Communications Corporation, *Memorandum Opinion and Order*, 15 FCC Rcd 15566, 15571 (para. 11) (Int'l Bur. 2000) (*First Columbia Milestone Order*); PanAmSat Licensee Corp., Application for Authority to Construct, Launch, and Operate a Ka-Band Communications Satellite System in the Fixed-Satellite Service at Orbital Locations 58° W.L. and 125° W.L., *Memorandum Opinion and Order*, 16 FCC Rcd 11534, 11537-38 (para. 12) (2001) (*PanAmSat Ka-Band License Revocation Review Order*) (noting that milestones are intended to limit warehousing).

⁴⁴⁴ 2 GHz Order, 15 FCC Rcd at 16179 (para. 108).

⁴⁴⁵ 2 GHz Order, 15 FCC Rcd at 16178 (para. 108).

7. Commencement of Physical Construction

192. The *Notice* observed that the milestone schedule adopted in the *2 GHz Order*, included a separate milestone for the physical construction of the satellite, and invited comment on including this milestone for all future licensees.⁴⁴⁶ No one commented on this proposal. We conclude that this milestone will provide additional assurance that licensees are making adequate progress towards constructing and launching their satellite systems, and so protects against warehousing. Accordingly, we adopt it.

193. Neither the *Notice* nor the *2 GHz Order* specified in detail what showing would be required to demonstrate compliance with this milestone. Therefore, we will not establish a specific test in this Order. Rather, we will require licensees to provide sufficient information to demonstrate to a reasonable person that they have commenced physical construction of their licensed spacecraft. We emphasize that, as with other milestones, the burden of proof for this showing is with the licensee.

8. Milestones for Satellite Systems Using Feeder Links

194. Above, we establish licensing procedures for systems using feeder links and intersatellite links, that may result in issuing operating authority for parts of a satellite system at different times.⁴⁴⁷ In those cases, we will apply the milestone schedule included in the first grant of authority to the entire satellite system. In the past, the Commission determined that requests for ISL authority and feeder link authority do not warrant a milestone extension.⁴⁴⁸ There is nothing in the *Notice* to suggest that we would revisit those conclusions in this proceeding.

9. Other Interim or Additional Milestones

195. *Background.* CTIA also states that the Commission should adopt other, interim milestones based on six-month intervals, but does not make any specific recommendations for these milestones.⁴⁴⁹ SES Americom replies that constructing a satellite system is more technically complex than constructing a terrestrial wireless network, and cannot be tied to a strict schedule.⁴⁵⁰

196. *Discussion.* By adopting new CDR and physical construction commencement milestones, we find that we will have sufficient assurance throughout the construction stage that the licensee is building its system. We see no reason to adopt additional six-month milestones, nor do we wish to limit licensees' flexibility to negotiate manufacturing contracts that best serve their needs within our general milestone framework. Furthermore, CTIA does not provide sufficient detail for its six-month milestone suggestion to enable us to adopt it here.

⁴⁴⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3881 (para. 103), citing *2 GHz Order*, 15 FCC Rcd at 16177-78 (para. 106).

⁴⁴⁷ Section VI.E.1.f.

⁴⁴⁸ See, e.g., *PanAmSat Ka-Band License Revocation Review Order*, 16 FCC Rcd at 11541 (para. 21); *Space Station Reform NPRM*, 17 FCC Rcd at 3860-61 (para. 38).

⁴⁴⁹ CTIA Comments at 5-6.

⁴⁵⁰ SES Americom Reply at 21-22.

10. Enforcement of Milestone Requirements

197. *Background.* The Commission also proposed several measures, in addition to its current milestone policies, to strengthen its milestone requirements. Currently, failure to meet a milestone results only in cancellation of the license.⁴⁵¹ The Commission sought comment on imposing forfeiture penalties for failure to meet milestones.⁴⁵² It also sought comment on whether, and to what extent, we should prohibit licensees who miss a milestone from applying for other satellite licenses.⁴⁵³ For example, the Commission invited comment on prohibiting the licensee from applying for another satellite license, or applying for a license to operate a space station in that band, or to operate at that orbit location in the case of GSOs, either permanently, for a certain number of years, or until the licensee has shown that it would meet all its milestone requirements if it were granted another space station license.⁴⁵⁴

198. *Discussion.* SIA claims that imposing penalties other than the loss of the license in question on licensees that fail to meet their milestones could discourage applicants from filing licenses for new or innovative satellite systems.⁴⁵⁵ Intelsat opposes prohibiting a licensee from applying for another satellite license in the same band or orbital location if a milestone is missed, and it argues that such a penalty would discourage licensees from taking necessary risks and could overly penalize such licensees.⁴⁵⁶

199. We are sensitive to SIA's and Intelsat's concerns. Accordingly, we will not impose additional penalties on all satellite licensees who miss milestones. Nevertheless, we believe that such penalties might be warranted in possible cases of speculation. In this Order below, we eliminate the satellite anti-trafficking rule, and adopt new safeguards against speculation. One of those safeguards is a limit on the number of pending applications and unbuilt satellites an applicant may have. That limit is five GSO-like satellites and one NGSO-like satellite system in any frequency band.⁴⁵⁷ For the reasons discussed below, we find that our proposed limits, in addition to the milestone revisions and bond requirement we adopt here, will be adequate to discourage speculation in most cases.⁴⁵⁸ In unusual cases in which the limits do not discourage an applicant from filing speculative applications, however, those speculative filings could lead to "warehousing" orbital locations.⁴⁵⁹ In warehousing cases, we have removed authority from

⁴⁵¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 106), *citing*, Morningstar Satellite Company, L.L.C., *Memorandum Opinion and Order*, 15 FCC Rcd 11350 (Int'l Bur., 2000); *PanAmSat Ka-band License Cancellation Order*, 15 FCC Rcd 18720.

⁴⁵² *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 106).

⁴⁵³ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 106).

⁴⁵⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 106).

⁴⁵⁵ SIA Comments at 33.

⁴⁵⁶ Intelsat Comments at 21.

⁴⁵⁷ Section VII.E.3.

⁴⁵⁸ Section VII.E.3.

⁴⁵⁹ Section VII.E.3., Pegasus Comments at 5.

licensees who have not met their satellite construction and launch schedules, so that those licensees are not permitted to waste scarce orbital locations and channels.⁴⁶⁰ In other words, warehousing occurs when a licensee has not shown an adequate commitment to move forward with its business plan.⁴⁶¹ Warehousing prevents other potential licensees willing and able to move forward with their business plans from attempting to provide service to the public in a timely manner. Therefore, ensuring that we have adequate means to prevent warehousing is crucial to achieving the goals of this proceeding. As a logical outgrowth of the Commission's proposal to prohibit a licensee from filing future satellite applications upon failure to meet a milestone, we will apply a more strict limit on the number of pending applications and unbuilt satellites for a licensee that has established a pattern of failure to meet milestones.

200. This stricter limit should enable us to address instances of warehousing, while also addressing SIA's and Intelsat's concern about discouraging parties from applying for satellite licenses regardless of their intent to proceed with their business plans. We base this more strict limit on a variation of Pegasus's proposal of two unbuilt satellites.⁴⁶² We will apply this limit to both GSO-like and NGSO-like systems, in all frequency bands. In other words, applicants who have established a pattern of missing milestones with two or more applications pending, or with two licensed-but-unbuilt satellite systems of any kind, will not be permitted to file another GSO-like application or NGSO-like application in any frequency band.⁴⁶³ We adopt a presumption that missing three milestones in any three year period would constitute a "pattern of failure to meet milestones" for these purposes. At the time any licensee misses three milestones in three years, we will presume that the licensee's applications were speculative, and the lower limit on pending applications and unbuilt satellites will remain in effect unless and until the licensee provides adequate information to rebut that presumption, or to demonstrate that it is very likely to construct its licensed facilities if it were allowed to file more applications.

201. We have ample authority for adopting this additional milestone enforcement measure. The *Notice* advised interested parties that the Commission was contemplating an additional sanction of this kind.⁴⁶⁴ In addition, the Communications Act gives the Commission authority to establish qualification requirements for license applicants.⁴⁶⁵ By applying for a

⁴⁶⁰ See Advanced Communications Corporation, *Memorandum Opinion and Order*, 10 FCC Rcd 13337, 13342 (para. 19) (Int'l Bur. 1995), *aff'd* 11 FCC Rcd 3399 (1995); Volunteers in Technical Assistance, *Order and Authorization*, 11 FCC Rcd 1358, 1363 (para. 15) (Int'l Bur. 1995); Norris Satellite Communications, Inc., *Order*, 11 FCC Rcd 5402 (Int'l Bur. 1996).

⁴⁶¹ *Nexsat Order*, 7 FCC Rcd at 1991 (para. 8), *citing* MCI Communications Corporation, *Memorandum Opinion and Order*, 2 FCC Rcd 233 (1987).

⁴⁶² Pegasus Comments at 5.

⁴⁶³ We will also presume that a licensee that creates a pattern of obtaining licenses and then surrendering them before a milestone deadline is also engaging in speculative activity, and will impose the stricter limits unless and until the licensee rebuts this presumption.

⁴⁶⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 106).

⁴⁶⁵ Section 308(b) of the Communications Act, 47 U.S.C. § 308(b): "All applications for station licenses, or modifications or renewals thereof, shall set forth such facts as the Commission by regulation may prescribe as to the citizenship, character, and financial, technical, and other qualifications of the applicant to operate the station;"

satellite license, an applicant implicitly states that it does not intend to hold the license merely to preclude others from going forward with their business plans. It is reasonable to impose a sanction on licensees that do not meet this implicit promise.

202. In light of our decisions to establish milestones for spacecraft CDR and commencement of physical construction of a spacecraft, to include milestone requirements in the rules, to require licensees to post bonds, and to limit the right to file applications of parties who establish a pattern of missing milestones, we find that rules specifying additional forfeiture penalties are not warranted at this time. Section 1.80 of the Commission's rules already provides adequate authority for the Commission to impose forfeiture penalties upon failure to comply with a rule or a license condition.⁴⁶⁶ Accordingly, in the event that a party applies for satellite licenses without the intent to construct or launch a satellite, we will determine whether starting a proceeding to consider forfeiture penalties is warranted.

11. Incentives for Early Launch

203. *Background.* We sought comment on establishing incentives for implementing satellite systems before the launch milestone deadline, such as extending the satellite license term by two years if the licensee launches its first satellite by at least a certain number of months before the applicable launch milestone.⁴⁶⁷ We invited parties to propose other incentives.⁴⁶⁸

204. *Discussion.* No one commented on this proposal. We find that the other proposals we adopt in this proceeding should be sufficient to ensure compliance with milestone requirements in most cases. We may consider revisiting this proposal if our experience reveals that additional incentives to comply with milestone requirements are necessary.

12. Alternative Milestone Mechanism

205. *Background.* As an alternative to the milestone requirements proposed in the *Notice*, the Commission invited comment on requiring that licensees spend a certain amount of money on the construction of its satellite system each year.⁴⁶⁹

206. *Discussion.* CTIA supports this proposal.⁴⁷⁰ Teledesic agrees that the proposal to require expenditure of a certain amount of money each year would improve the current system, but it encourages the Commission to entertain other, more creative, improvement options.⁴⁷¹ On

⁴⁶⁶ "A forfeiture penalty may be assigned against any person found to have: (1) Willfully or repeatedly failed to comply substantially with the terms and conditions of any license, permit, certificate, or other instrument of authorization issued by the Commission; (2) Willfully or repeatedly failed to comply with any of the provisions of the Communications Act of 1934, as amended; or of any rule, regulation, or order issued under that Act by the Commission ..." 47 C.F.R. § 1.80(a)(1), (2).

⁴⁶⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 107).

⁴⁶⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3883 (para. 107).

⁴⁶⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3882 (para. 104).

⁴⁷⁰ CTIA Comments at 6.

⁴⁷¹ Teledesic Comments at 44.

the other hand, Hughes criticizes mandatory expenditure milestones as having the potential to encourage licensees to project unrealistically low total costs.⁴⁷² Hughes and SES Americom also worry that such a milestone could alter the relationship between operators and manufacturers.⁴⁷³ SES Americom also asserts that this proposal would limit operators' flexibility to allocate resources among different projects during the construction period.⁴⁷⁴

207. We decide against replacing milestones with a requirement that licensees spend a certain amount of money on the construction of their satellite systems each year. We agree with Hughes that mandatory expenditure milestones could encourage licensees to project unrealistically low costs. In those cases, meeting cost-based milestones would not necessarily show that the licensee is progressing towards implementation of its system. In addition, to protect against this possibility, we would need to develop methods for determining whether a licensee's cost projections are reasonable, which could prove overly complex. On the other hand, the milestones we adopt in this Order will provide a reasonable basis for assessing progress of system implementation. Moreover, to a certain extent, the payment of money is already a factor in our milestones, in that we examine the payment schedule to determine whether payments are spread evenly throughout the term of the contract term rather than deferred to the end of the term.⁴⁷⁵ Mandating a payment schedule with any more specificity might not reflect the best schedule for the particular satellite being built.

13. On-site Inspections

208. CTIA proposes that the Commission make on-site inspections to verify milestone completion.⁴⁷⁶ SES Americom maintains that this would delay the satellite licensing process.⁴⁷⁷ We believe that the milestone rule revisions we adopt in this Order should be sufficient in most cases to determine whether a licensee has met a particular milestone. In particular, in cases where a licensee has not adequately demonstrated that it has met a milestone, we have authority to revoke the license without inspecting an on-site facility. Nevertheless, an on-site inspection of manufacturing facilities is one reasonable method to supplement the record in a milestone review proceeding, in cases where it may be necessary or appropriate to supplement the record. The Commission retains discretion to make such inspections.

D. Trafficking in Licenses

1. Elimination of Satellite Anti-Trafficking Rule

⁴⁷² Hughes Comments at 45-46.

⁴⁷³ Hughes Comments at 45-46; SES Americom Reply at 13.

⁴⁷⁴ SES Americom Reply at 22.

⁴⁷⁵ *See Tempo Order*, 1 FCC Rcd at 21 (para. 7).

⁴⁷⁶ CTIA Comments at 6.

⁴⁷⁷ SES Americom Reply at 22.

209. *Background.* The Commission prohibits licensees from selling "bare" satellite licenses for profit.⁴⁷⁸ This "anti-trafficking rule" is intended to discourage speculators and prevent unjust enrichment of those who do not implement their proposed systems.⁴⁷⁹ On the other hand, the existing satellite anti-trafficking rules may prevent a satellite license from being transferred to the entity that would put it to its highest valued use in the shortest amount of time.⁴⁸⁰ Accordingly, the *Notice* invited comment on whether we should eliminate the anti-trafficking rule for satellite licenses.⁴⁸¹

210. The Commission adopted this restriction on sales of licenses to address two concerns. First, an entity might obtain a license without any intention of building facilities or providing service, but rather only to sell the license for profit. This would benefit the seller, but would not necessarily provide any benefit to the public.⁴⁸² Another concern is that, if a licensee directs its attention to selling its license to the exclusion of constructing facilities, the spectrum assigned through the license would not be put to any use until after the license were sold. In this case, during the time before the sale, the public would be deprived of whatever valuable service might have otherwise been provided by some other entity.⁴⁸³

211. On the other hand, the Commission noted that there may be many situations in which it would be efficient to allow an entity that applied for and received a satellite license to resell that license at any time, provided that the purchaser meets the milestones in the original license.⁴⁸⁴ In particular, allowing a licensee whose business plan is no longer viable to sell its license to another entity with another business plan or adequate financial resources would benefit the public by putting scarce orbit and spectrum resources sooner than would be possible otherwise.⁴⁸⁵ In addition, allowing the sale of licenses would reduce the risk associated with constructing and launching a satellite system, by giving licensees the option of selling their licenses if they find that their business plans are not viable, and so could encourage satellite deployment.⁴⁸⁶ These factors weigh in favor of removing the restriction on sales of licenses.

⁴⁷⁸ *Space Station Licensing Reform NPRM*, 17 FCC Rcd at 3883-84 (paras. 109-10). *See also, e.g.*, Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Third Report and Order*, CC Docket No. 92-297, 12 FCC Rcd 22310, 22339-40 (para. 74) (1997) (*Ka-Band Service Rules Order*). A "bare" license is a license to operate a communications facility when no facility has been constructed. *Space Station Licensing Reform NPRM*, 17 FCC Rcd at 3883 n.144.

⁴⁷⁹ *Ka-band Service Rules Order*, 12 FCC Rcd at 22339 (para. 74).

⁴⁸⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 111).

⁴⁸¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3883-86 (paras. 109-17).

⁴⁸² *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 110).

⁴⁸³ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 110).

⁴⁸⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 111).

⁴⁸⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 111).

⁴⁸⁶ *See Space Station Reform NPRM*, 17 FCC Rcd at 3884-85 (paras. 112-13).

212. In the *Notice*, the Commission also requested comment on whether the satellite licensing process itself might tend to discourage parties from applying for a license merely to sell it. First, the Commission proposed requiring the purchaser to meet the milestones in the original license, which would also serve to discourage speculation because the license would lose value as the milestone date drew near unless the licensee had made sufficient progress in constructing its satellite.⁴⁸⁷ In addition, the Commission noted that preparing a satellite license application and filing it with the Commission is a technically complex and costly undertaking, and that those costs might help to limit purely speculative applications.⁴⁸⁸ Based on all these considerations, we proposed to eliminate the anti-trafficking rule and invited comment on whether we had struck the correct balance between the competing goals of preventing unjust enrichment and expediting service to the public.⁴⁸⁹

213. *Pleadings*. Some parties maintain that eliminating the anti-trafficking rule would increase the incentives for filing speculative applications.⁴⁹⁰ Inmarsat asserts that if there is an increase in speculation, satellite operators would face an increase in costs that could be passed on to consumers.⁴⁹¹ Inmarsat claims further that eliminating the anti-trafficking rule would delay service to the public.⁴⁹² Hughes maintains that it is unreasonable to make a public interest determination that an applicant is qualified to hold a license, and then allow it to sell the license to another party without any Commission review.⁴⁹³

214. Alternatively, ICO supports elimination of the anti-trafficking rule, arguing that it would be consistent with the Commission's efforts to allow secondary markets to develop for spectrum in other services.⁴⁹⁴ ICO argues that the Commission has relaxed its anti-trafficking rules for other Commission licensees, and that there is no reason to hold satellite licensees to a higher standard.⁴⁹⁵ ICO maintains that implementing reasonable milestone requirements would

⁴⁸⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 116).

⁴⁸⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 117).

⁴⁸⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 117).

⁴⁹⁰ Hughes Comments at 28; SES Americom Comments at 5; Inmarsat Comments at 11; SES Americom Reply at 12.

⁴⁹¹ Inmarsat Comments at 11.

⁴⁹² Inmarsat Comments at 11.

⁴⁹³ Hughes Comments at 49-50.

⁴⁹⁴ ICO Reply at 2-3, *citing* Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets, *Policy Statement*, 15 FCC Rcd 24178, 24181 (para. 10) (2000) (*Spectrum Secondary Markets Policy Statement*); Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Notice of Proposed Rulemaking*, WT Docket No. 00-230, 15 FCC Rcd 24203 (para. 10) (2000) (*Spectrum Secondary Markets NPRM*).

⁴⁹⁵ ICO Reply at 3, *citing, e.g.*, Amendment of Section 73.3597 of the Commission's Rules (Applications for Voluntary Assignments or Transfers of Control), *Report and Order*, BC Docket No. 81-897, FCC 82-519, 52 Rad. Reg. 2d 1081, 1086 (para. 21) (1982) (*Broadcast Trafficking Report and Order*) (elimination of "three-year rule" for broadcast stations).

provide adequate protection against unjust enrichment.⁴⁹⁶ ICO disagrees that the anti-trafficking rule is needed to discourage speculation.⁴⁹⁷ Finally, ICO points out that allowing sales of licenses can help mitigate risk and so helps attract investors.⁴⁹⁸ Teledesic argues that, in the past, anti-trafficking rules have generally not discouraged speculation in licenses, but rather added unnecessary complication to legitimate business transactions.⁴⁹⁹

215. *Discussion.* We eliminate the anti-trafficking policy for satellite licenses. We conclude that, while preventing unjust enrichment and expediting service to the public are both important policy goals, expediting service to the public warrants more weight. The issue raised in the *Notice* is *not* whether eliminating the restriction on satellite license sales might increase the incentives for speculation. The Commission recognized that eliminating the rule would increase the incentives for speculation.⁵⁰⁰ Rather, the relevant issue is whether the public interest benefits of eliminating the satellite anti-trafficking rule outweigh the benefits of keeping the rule.⁵⁰¹ For reasons discussed below, we find that the benefits of keeping the anti-trafficking rule are relatively small given the other safeguards against speculation we adopt in this Order, while the benefits of eliminating the rule are fairly substantial. Therefore, we are adopting several safeguards against speculation in this Order below. In addition, we retain our authority to review transfer of control applications to determine whether the proposed transfer will further the public interest, convenience, and necessity.

216. Moreover, the licensing procedures we adopt today should discourage speculation by themselves to some extent. Because we will require buyers to meet the milestone schedule in the original license, the value of the license will decrease rapidly as each milestone deadline approaches. Because milestone enforcement will reduce the profits a speculator can make from its sale, it will discourage some speculation. In addition, we use a first-come, first-served procedure for GSO-like satellites because awarding licenses to the first qualified applicant, by itself, will not preclude us from licensing other applicants at other orbit locations. Thus, in cases in which there are other orbit locations available, applicants are unlikely to purchase a license from a "speculator" because they can simply apply for one.⁵⁰² Also, as the Commission observed in the *Notice*, there are significant costs associated with filing a satellite application.⁵⁰³ These costs include the technical analyses required to prepare a satellite application, the application

⁴⁹⁶ ICO Reply at 3-4.

⁴⁹⁷ ICO Reply at 4.

⁴⁹⁸ ICO Reply at 4-5.

⁴⁹⁹ Teledesic Comments at 35-38; Teledesic Reply at 28-30.

⁵⁰⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 110).

⁵⁰¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3884-85 (paras. 111-15).

⁵⁰² We realize that a GSO-like applicant may have an incentive to purchase a license from a speculator rather than apply for another location with the Commission in cases where its business plans require a specific orbit location. In most cases, however, orbit locations close to each other in the GSO orbit are close substitutes for each other, so that there will be less incentive to purchase a license from a speculator when another close orbit location is available.

⁵⁰³ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 117).

fee,⁵⁰⁴ annual regulatory fees,⁵⁰⁵ and ITU cost recovery fees. Finally, we adopt other safeguards against speculation in this Order, such as a bond requirement, and limits on the number of pending applications and unbuilt satellites a licensee may have in each frequency band. Further, our procedure for NGSO-like satellite systems, where we divide the available spectrum equally among the qualified applicants in a processing round, also establishes disincentives against speculative applications. Because the speculator's spectrum rights would be redistributed to the other licensees if and when the speculator misses the first milestone, other licensees have some incentive to acquire spectrum through this process rather than to buy spectrum rights from the speculator.⁵⁰⁶ Although none of these factors by themselves would be sufficient to prevent speculation, they provide enough protection when combined with the speculation safeguards discussed below⁵⁰⁷ to make the anti-trafficking rule for satellites superfluous.

217. Thus, while the benefits of retaining the current restriction on sales of satellite licenses are relatively small, the benefits of eliminating the restriction are substantial. Eliminating the restriction on sales expedites provision of satellite service to the public by facilitating the transfer of licenses in the secondary market to those parties that have the greatest incentive and ability to construct a satellite system within the required time frame.⁵⁰⁸ In addition, easing unnecessary restrictions on post-licensing transactions will enable satellite spectrum to move more efficiently to its highest and best use without the need for relicensing procedures. It helps satellite licensees mitigate their business risk, and so encourages investment in the satellite industry.⁵⁰⁹

218. In addition, we agree with ICO that eliminating the restriction on sales of satellite services could help a secondary market to develop for satellite capacity.⁵¹⁰ Secondary markets

⁵⁰⁴ The Commission listed the satellite application fees in the *Notice*, but those fees have since been increased. The application fees are now \$98,645 for each GSO space station, and \$339,730 for each NGSO satellite system. Amendment of the Schedule of Application Fees Set Forth in Section 1.1102 through 1.1107 of the Commission's Rules, *Order*, GEN Docket No. 86-285, 17 FCC Rcd 13948, 13982-83 (2002). These fees took effect on December 5, 2002. *See* Notice of Publication in the Federal Register and Announcement of Effective Date of Schedule of Charges for Application Fees, *Public Notice*, DA 02-3080 (released Nov. 7, 2002).

⁵⁰⁵ Currently, the regulatory fee is \$99,700 per space station for GSO licensees and \$103,200 per licensed NGSO satellite system for NGSO licensees. 47 C.F.R. § 1.1156. The Commission has proposed increasing these fees to \$115,625 and \$108,375, respectively. Assessment and Collection of Regulatory Fees for Fiscal Year 2003, *Notice Of Proposed Rulemaking*, MD Docket No. 03-83, FCC 03-64 (released Mar. 26, 2003).

⁵⁰⁶ In this Section below, we adopt the proposal in the *Space Station Reform NPRM* to maintain the current milestone schedule when a license is sold. *See also Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 116).

⁵⁰⁷ Section VII.E.

⁵⁰⁸ *See Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 111). We note that this approach is consistent with the recommendations of the Spectrum Policy Task Force Report. SPTF Report at 38-39.

⁵⁰⁹ *See Space Station Reform NPRM*, 17 FCC Rcd at 3884-85 (paras. 112-13).

⁵¹⁰ ICO Reply at 2-3.

can provide benefits to satellite users and consumers not only through the outright transfer of licenses, but also through partial redistribution or transfer of unused spectrum. By encouraging satellite licensees to sell unused spectrum to other parties willing to put the spectrum into use, we allow parties flexibility to transfer satellite bandwidth to more efficient uses in response to changing market conditions and consumer demands, and we allow marketplace forces to determine which companies succeed.⁵¹¹ Furthermore, as ICO notes, we have relaxed our restrictions on sales of other licenses for this reason.⁵¹² For example, we have recently eliminated anti-trafficking restrictions in the cellular service,⁵¹³ and in most other terrestrial services, we allow the full or partial transfer of licenses without holding requirements. Similarly, we abolished our three-year holding rule⁵¹⁴ for broadcast licenses 20 years ago, concluding that the public interest is usually best served by allowing station sales transactions to be regulated by marketplace forces.⁵¹⁵ We also held that our previous concerns about speculation in broadcast licenses were outweighed by the public interest benefits of removing restrictions on sales of licenses.⁵¹⁶ We find this reasoning as persuasive today as it was in 1982.⁵¹⁷

219. We also note that there are other factors that weigh in favor of eliminating the restriction on sales of licenses. First, as we noted above, eliminating the restriction greatly facilitates post-licensing negotiations among licensees.⁵¹⁸ Given that we adopt procedures in this proceeding to expedite satellite licensing by avoiding the need for pre-licensing negotiations, it is important that we do not discourage post-licensing negotiations. In light of those measures, the restriction on sales of licenses will not be needed as much as it was in the past.

220. As we noted above, the relevant issue is whether the public interest benefits of eliminating the satellite anti-trafficking rule outweigh the benefits of keeping the rule.⁵¹⁹

⁵¹¹ *Spectrum Secondary Markets Policy Statement*, 15 FCC Rcd at 24182 (para. 11).

⁵¹² ICO Reply at 3.

⁵¹³ Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission’s Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, *Report and Order*, WT Docket No. 01-108, 17 FCC Rcd 18401, 18436-38 (paras. 70-74) (2002).

⁵¹⁴ The three-year holding rule prohibited transfers of broadcast licenses unless the licensee had held the license for a minimum of three years.

⁵¹⁵ *Broadcast Trafficking Report and Order*, 52 Rad. Reg. 2d at 1087 (para. 23).

⁵¹⁶ *Broadcast Trafficking Report and Order*, 52 Rad. Reg. 2d at 1087-88 (paras. 24-25).

⁵¹⁷ Courts have also upheld past Commission efforts to replace government regulation with reliance on market forces in appropriate circumstances. *FCC v. WNCN Listeners Guild*, 450 U.S. 582 (1981) (affirming Commission conclusion that promoting diversity in broadcasting through market forces and competition among broadcasters is in the public interest); *WOLD Communications, Inc., v. FCC*, 735 F.2d 1465, 1475 (D.C. Cir., 1984) (“But the public interest touchstone of the Communications Act, beyond question, permits the FCC to allow the market place to substitute for direct Commission regulation in appropriate circumstances”).

⁵¹⁸ Section V.C.2.

⁵¹⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3884-85 (paras. 111-15).

Therefore, parties arguing merely that the anti-trafficking rule is needed to discourage speculation do not provide a sufficient basis for retaining the rule.⁵²⁰ Of the parties arguing in favor of the anti-trafficking rule, only Inmarsat comments on whether the benefits of the restriction outweigh the benefits of removing the restriction. Specifically, Inmarsat asserts that removing the restriction might cause delay in provision of satellite services to the public, and might increase the cost of satellite services.⁵²¹ We disagree with both of Inmarsat's assertions. We disagree that removing the restriction will delay provision of satellite services to the public. In fact, we conclude that eliminating the restriction on satellite license sales on balance should expedite service to the public. As we noted in the *Notice*, the purchaser will often be able to implement the project when the original licensee finds it cannot.⁵²² In addition, because we require buyers to meet the milestone schedule in the original license, the sale of a license should not delay service to the public.⁵²³ We also disagree with Inmarsat that removing the restriction will result in any significant increase in the cost of satellite services. The Commission observed in the *Notice* that it can cost millions of dollars to design, build, and launch a satellite system.⁵²⁴ If speculators were able to sell the licenses at excessive prices, the excessive price paid becomes part of the operator's fixed cost, and would not affect the price of satellite services in a competitive market, where prices are determined by the marginal cost of the highest cost operator rather than fixed costs.

221. Finally, contrary to Hughes's assertion, the rule revisions we adopt here will not allow licensees to sell their licenses without Commission review.⁵²⁵ Section 310(d) of the Act requires prior Commission review of all transfers of licenses,⁵²⁶ and Section 25.119(a) of the Commission's rules prohibits transfers of satellite licenses unless the Commission determines that the public interest, convenience, and necessity will be served thereby.⁵²⁷ The Commission did not propose any revision to that requirement, nor do we adopt any such revision here. Thus, by eliminating the anti-trafficking rule, we will no longer review each satellite transfer of control application to determine whether the proposed transaction is the sale of a bare license for profit, but we will continue to review transfer of control applications to determine whether the proposed transaction furthers the public interest, convenience, and necessity. As part of that determination, we will consider whether the transferee is qualified to hold a satellite license, and whether the proposed transaction is likely to facilitate provision of service to the public. We also note that the

⁵²⁰ Hughes Comments at 28; SES Americom Comments at 5; SES Americom Reply at 12.

⁵²¹ Inmarsat Comments at 11.

⁵²² See *Space Station Reform NPRM*, 17 FCC Rcd at 3885 (para. 114).

⁵²³ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 111), citing *MCI Order*, 2 FCC Rcd at 234 (para. 7); *First Columbia Milestone Order*, 15 FCC Rcd at 15571 n.35; Columbia Communications Corporation, *Memorandum Opinion and Order*, 15 FCC Rcd 16496, 16500-01 (para. 12) (Int'l Bur. 2000) (*Second Columbia Milestone Order*), *PanAmSat Ka-band License Cancellation Review Order*, 16 FCC Rcd at 11538 (para. 13).

⁵²⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 117).

⁵²⁵ Hughes Comments at 49-50.

⁵²⁶ 47 U.S.C. § 310(d).

⁵²⁷ 47 C.F.R. § 25.119(a).

Commission's public interest authority is broad enough to cover certain specific sensitivities that have been raised in this proceeding, as well as concerns of the Commission. Thus, we note that we may also examine, if appropriate, whether the seller obtained the license in good faith or for the primary purpose of selling it for a profit, whether the licensee makes serious efforts to develop a satellite or constellation, and/or whether the licensee faces changed circumstances.

222. Allowing those with no intention of building a satellite system to profit from the Commission's regulatory process would be contrary to the public interest. We do not expect this situation to arise very often, however.⁵²⁸ In addition, the Commission always has the option to consider initiating a rulemaking proceeding to determine whether the available spectrum should be reallocated. Finally, we emphasize that a license purchaser will be required to comply with all the rules applicable to the original licensee, including but not limited to milestones, the performance bond, and the limits on pending applications and unbuilt satellites. We do not anticipate that such a review will slow down the processing of transfer requests.

223. In summary, we adopt the proposal in the *Notice* to eliminate the prohibition on sales of bare satellite licenses for profit. We find that the public interest benefits of retaining this restriction are significantly outweighed by the benefits of eliminating the restriction.

2. Revision of Anti-Trafficking Rule

224. *Background.* Intelsat proposes revising the anti-trafficking rule rather than eliminating it. Intelsat observes that the Commission's broadcast rules prohibit parties from accepting payments for withdrawing petitions to deny broadcast licenses unless the payments are less than the petitioner's legitimate and prudent out-of-pocket expenses, except in cases of *bona fide* merger transactions.⁵²⁹ Intelsat proposes applying this standard to transfers of both licenses and pending applications, claiming that it is a "more relaxed approach" than our current anti-trafficking rule.⁵³⁰ PanAmSat recommends retaining the current anti-trafficking policy, but applying it flexibly to allow ownership changes that are part of legitimate business transactions, or are entered into for financing purposes.⁵³¹

225. *Discussion.* We do not adopt Intelsat's or PanAmSat's proposals. Above, we determined that eliminating the restriction on sales of satellite licenses will yield fairly substantial public interest benefits, with relatively few negative effects. In particular, we found that any

⁵²⁸ While substantial evidence that a satellite license was obtained exclusively for purposes of selling for profit will weigh heavily against finding that a subsequent transfer of the license would further the public interest, bald allegations or weakly supported claims of speculation will not be afforded this weight in our public interest determination. We initiated this proceeding to expedite our satellite licensing process, in part to enable licensees to provide service to the public faster than is now possible. *Space Station Reform NPRM*, 17 FCC Rcd at 3852-53 (paras. 12-14). Eliminating the anti-trafficking rule helps further that policy goal. *Space Station Reform NPRM*, 17 FCC Rcd at 3885 (para. 115). It would undercut that goal to allow commenters to use our speculation concerns primarily for anti-competitive purposes to delay approval of other parties' transactions.

⁵²⁹ Intelsat Comments at 17-18, *citing* 47 C.F.R. §§ 73.3525, 73.3588.

⁵³⁰ Intelsat Comments at 18-19.

⁵³¹ PanAmSat Comments at 18-19. *See also* Hughes Comments at 50-51 (retain rule but grant waivers in cases of "genuine cases of business transfers.")

increase in speculation resulting from the eliminating the restriction should not result in an increase in the price of satellite services. Therefore, we do not see any public interest benefit from restricting the sales of some licenses based on whether the sale is part of a "legitimate business transaction" or "*bona fide* merger transaction." Furthermore, as Teledesic points out, anti-trafficking rules in the past have generally not eliminated speculation and have hindered legitimate business transactions.⁵³²

E. Safeguards Against Frivolous or Speculative Applications

1. Safeguards in First-Come, First-Served Procedure

226. In the *Notice*, the Commission proposed several measures to discourage frivolous or speculative applications in the first-come, first-served procedure. First, the Commission proposed placing a limit on the number of satellite license applications any one entity can have on file.⁵³³ In conjunction with this proposed limit, the Commission proposed an attribution rule to determine the applicant for purposes of this rule.⁵³⁴ Further, the Commission proposed prohibiting applicants from transferring their place in any queue to another party.⁵³⁵ For reasons discussed below, we adopt these proposals.

2. Safeguards in Modified Processing Rounds

227. The *Notice* did not propose any specific rule revisions to limit speculative applications in processing rounds. Teledesic, however, maintains that processing rounds create an incentive for speculation.⁵³⁶ We agree. By announcing a cut-off date in a processing round, the Commission gives both speculative and legitimate applicants an opportunity to file, and to have their applications considered concurrently with the lead application. Furthermore, announcing a cut-off date can cause a sense of scarcity to develop, when applicants recognize that this may be their only opportunity to secure access to that orbit/spectrum resource. Consequently, we will adopt the same safeguards against speculation in modified processing rounds that we adopt for the first-come, first-served procedure.⁵³⁷ We discuss these safeguards below.

3. Limit on Number of Pending Applications

228. *Background.* The *Notice* proposed limiting the number of satellite license applications any one applicant can have pending in a frequency band to five GSO orbital

⁵³² Teledesic Comments at 35-38; Teledesic Reply at 28-30.

⁵³³ *Space Station Reform NPRM*, 17 FCC Rcd at 3864-65 (para. 51).

⁵³⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3865 (para. 52).

⁵³⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3865-66 (para. 53).

⁵³⁶ Teledesic Comments at 5-8.

⁵³⁷ The Commission proposed these safeguards for both GSO and NGSO applications. See *Space Station Reform NPRM*, 17 FCC Rcd at 3864-66 (paras. 51-53).

locations and one NGSO system.⁵³⁸ The *Notice* observed that the Commission placed a limit on the number of pending broadcast applications in the *TV and FM Broadcast Order*.⁵³⁹ Furthermore, our rules currently limit the number of additional GSO orbital locations that may be assigned in each frequency band for satellite operators with previously authorized but unlaunched satellites in that band.⁵⁴⁰ The Commission asked in the *Notice* whether the limit should include authorized but unlaunched satellites in addition to pending applications.⁵⁴¹

229. *Discussion.* Teledesic argues that limiting pending satellite applications is a reasonable way to limit speculation without restricting applicants' business plans.⁵⁴² Teledesic also maintains that adopting this proposal would give licensees an incentive to turn in licenses for satellite systems that they do not intend to build.⁵⁴³ Hughes, however, asserts that this proposal is too restrictive because it could preclude legitimate applications from consideration.⁵⁴⁴ Alternatively, SES Americom asserts that limiting the number of pending satellite applications is not restrictive enough. SES Americom argues that such a limit would not prevent speculative applications because there could be an unlimited number of speculative applicants.⁵⁴⁵

230. We adopt our proposed limits on pending applications. We agree with Teledesic that limiting pending applications to five GSO orbit locations or one NGSO satellite system per frequency band will restrain speculation without restricting applicants' business plans. In addition, five orbit locations is reasonable because it gives licensees the option of providing a global service with good look angles for each satellite. We further agree that limiting pending applications gives licensees an incentive to turn in licenses for satellite systems that they do not intend to build. This in turn should make orbital locations available for reassignment more quickly than they would be if licensees waited until a milestone deadline. We disagree that this limit on pending applications will preclude legitimate applications from consideration. Rather, it simply requires satellite operators to prioritize their business plans. Although SES Americom is correct that this does not totally prevent speculation, it does provide, together with strict milestone enforcement and the new bond requirement we adopt above, some protection against speculation.

231. We also adopt our proposal to include authorized but unlaunched satellites in the five GSO-like orbit location limit.⁵⁴⁶ Adopting our proposal to limit unlaunched satellites

⁵³⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3864-65 (para. 51).

⁵³⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3864-65 (para. 51), *citing TV and FM Broadcast Order*, 50 Fed. Reg. at 19940 (para. 24).

⁵⁴⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3864-65 (para. 51), *citing* 47 C.F.R. § 25.140(f).

⁵⁴¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3864-65 (para. 51).

⁵⁴² Teledesic Comments at 28-29.

⁵⁴³ Teledesic Comments at 44.

⁵⁴⁴ Hughes Comments at 28-29.

⁵⁴⁵ SES Americom Comments at 4.

⁵⁴⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3865 (para. 51).

provides additional protection against speculation, without substantially restricting licensees' flexibility. No one commented on this proposal. We will apply this limit on a frequency band-by-frequency band basis. This is consistent with the Commission's current practice of limiting additional orbital locations for satellite operators with previously authorized but unlaunched satellites on a frequency band basis.⁵⁴⁷

232. PanAmSat and Pegasus do not comment directly on the proposed limit on pending satellite applications. In the context of the Commission's proposal to include a system of preferences in its processing round rules, however, PanAmSat supports a two-orbit-location limit, with one additional orbit location allowed in subsequent processing rounds, as is permitted currently in the Commission's rules.⁵⁴⁸ Pegasus advocates the current limit of two unbuilt satellites, but allowing applicants to exceed that limit upon a showing of a firm commitment to spend funds for constructing the additional satellites.⁵⁴⁹ Pegasus is concerned that parties applying for licenses for more than two locations are likely going to "warehouse" the additional locations.⁵⁵⁰ In this Order above, we reject proposals for systems of preferences intended to streamline processing rounds.⁵⁵¹ Here, we reject a two-unbuilt-satellite limit as a general proposition. Currently, the Commission's policy is to permit initial applicants in processing rounds to request two orbital locations per frequency band *per ocean region*, plus two over the continental United States (CONUS) region, for a total of eight per frequency band. Reducing the limit to five orbit locations provides additional protection against speculation, but still allows licensees to develop global satellite systems. If we were to reduce the limit to two, we would agree with Hughes that such a limit is likely to preclude legitimate applications from consideration. Moreover, considering requests for more than two pending GSO-like applications upon a case-by-case showing could result in licensing delay. Unlike the case-by-case showing proposed by Pegasus, we expect the five-pending-application rule to be an easily administered, bright-line rule. Reviewing those case-by-case showings might delay our review of other applications in the queue, which in turn would delay service to the public. Accordingly, we will not adopt Pegasus's proposal to impose a two-application limit on all GSO-like satellite applicants. Nevertheless, to address Pegasus's concern that allowing more than two pending satellite applications could lead to warehousing, we adopt in this Order above a limit of two pending applications and unbuilt satellites for licensees that have established a pattern of missing milestones.⁵⁵²

233. In summary, we will not accept any additional applications from entities which have more than five pending GSO-like satellite license applications or previously authorized but unlaunched GSO-like satellite systems, in any frequency band. Nor will we accept applications from entities with more than one pending application for an NGSO-like system, or more than one NGSO system where no satellites have been launched, in any frequency band. We emphasize

⁵⁴⁷ See *Space Station Reform NPRM*, 17 FCC Rcd at 3865 n.59; 47 C.F.R. § 25.140(f).

⁵⁴⁸ PanAmSat Comments at 10-11.

⁵⁴⁹ Pegasus Comments at 5.

⁵⁵⁰ Pegasus Comments at 5.

⁵⁵¹ Section V.C.2.

⁵⁵² Section VII.C.10.

that these limits apply only to applications for U.S. licenses for new GSO-like and NGSO-like satellite systems. These limits do not apply to applications for replacement satellites, renewals of NGSO-like constellation licenses, modifications, transfers of control, or any other satellite-related application. Nor will we include a U.S. applicant's foreign-licensed satellites in these limits.⁵⁵³ We find that these limits should discourage speculative satellite applications in most cases. In the event that our experience with these limits do not discourage a particular applicant from filing speculative applications, we will impose more stringent limits on the number of pending applications and unbuilt satellites on that applicant.⁵⁵⁴

4. Attributable Interest

234. *Background.* In the *Notice*, the Commission observed that limiting the number of orbit locations or constellations that an applicant can have pending requires it to determine who is an "applicant" for purposes of this limit.⁵⁵⁵ Therefore, the Commission proposed attribution rules prohibiting a party from filing a satellite application if it holds more than 33 percent of the total asset value of applicants with applications for five GSO orbital locations, and one NGSO satellite system, in any frequency band, pending before the Commission.⁵⁵⁶ We also noted that we adopted an attribution rule of 33 percent in the context of determining eligibility for the "new entrant" bidding credit in auctions for commercial broadcast service licenses.⁵⁵⁷

235. *Discussion.* Teledesic supports this proposal.⁵⁵⁸ Hughes claims that the Commission's proposal is too restrictive for separate operating companies that have overlapping stock ownership, and to joint ventures.⁵⁵⁹ Boeing claims that the proposed limit could be evaded by speculative applicants.⁵⁶⁰

236. We adopt our proposed attribution rule in a modified form. To limit speculative applications, we adopted a limit to the number of satellite applications an applicant can have pending before the Commission in this Order above.⁵⁶¹ This necessitates some attribution rule. Otherwise, applicants could evade the limit simply through corporate restructuring.

⁵⁵³ We adopt limits for non-U.S.-licensed satellite operators seeking access to the U.S. market in Section VIII.F. below.

⁵⁵⁴ Section VII.C.10. above.

⁵⁵⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3865 (para. 52).

⁵⁵⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3865 (para. 52).

⁵⁵⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3865 (para. 52), *citing* 47 C.F.R. § 73.5008(c); Implementation of Section 309(j) of the Communications Act -- Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, *Memorandum Opinion and Order*, MM Docket No. 97-234, 14 FCC Rcd 12541 (1999) (*Broadcast New Entrant Credit Order*).

⁵⁵⁸ Teledesic Comments at 29.

⁵⁵⁹ Hughes Comments at 29.

⁵⁶⁰ Boeing Comments at 7.

⁵⁶¹ Section VII.E.3.

237. Consequently, the issue is not *whether* to adopt an attribution rule, but *what* attribution rule to adopt. Neither Hughes nor Boeing persuades us that our proposed attribution rule is unreasonable. Hughes claims that the proposed rule is too restrictive for satellite operators with overlapping stock ownership or involved in joint ventures. We use the 33 percent standard for the "new entrant" credit in auctions for commercial broadcast licenses. In that context, the Commission found that 33 percent was sufficient to avoid undercutting the policy goal of promoting competitive entry into the broadcast industry, without unreasonably limiting broadcasters' efforts to obtain financing.⁵⁶² The same concerns apply here. In contrast, Boeing contends that this standard is not restrictive enough, because it could be evaded by speculative applicants.⁵⁶³ Therefore, to provide additional protection against speculation, we adopt two new provisions. First, we will revise our proposed attribution rule to include a controlling interest, and any other subsidiaries of that controlling interest.⁵⁶⁴ Second, we will calculate ownership interests on a fully diluted basis. All agreements, such as warrants, stock options, and convertible debentures, will generally be treated as if the rights thereunder already have been fully exercised. This will provide additional protection against speculation by precluding parties from evading the limits by using stock options. The Commission has adopted a substantially similar measure to define "designated entities," which are small businesses and minority-owned businesses that have been eligible for bidding credits in certain license auctions.⁵⁶⁵

238. Accordingly, if one applicant has an interest in another applicant, in which the equity (including all stockholdings, whether voting or non-voting, common or preferred) and debt interest or interests, in the aggregate, exceed 33 percent of the total asset value (defined as the aggregate of all equity plus all debt) of that applicant, the pending applications and unbuilt satellites of both applicants will be counted together for purposes of the limits.⁵⁶⁶ Also, if an applicant, or the subsidiary of an applicant, has a controlling interest in another applicant, the pending applications and unbuilt satellites of both applicants will be counted together for purposes of the limits.⁵⁶⁷ We will calculate ownership interests on a fully diluted basis, *i.e.*, all agreements, such as warrants, stock options, and convertible debentures, will generally be treated as if the rights thereunder already have been fully exercised.⁵⁶⁸

239. We explained above that the limits do not apply to applications other than new satellite applications. Similarly, this attribution rule does not preclude a participant in a

⁵⁶² *Broadcast New Entrant Credit Order*, 14 FCC Rcd at 12545-47 (paras. 9-11).

⁵⁶³ Boeing Comments at 7.

⁵⁶⁴ Specifically, we adopt here the "controlling interest" standard the Commission adopted in Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, *Order on Reconsideration of the Third Report and Order, Fifth Report and Order, and Fourth Further Notice of Proposed Rule Making*, WT Docket No. 97-82, 15 FCC Rcd 15293, 15323-27 (paras. 59-67) (2000) (*Part I Fifth Report and Order*). See also 47 C.F.R. § 1.2110(b)(2).

⁵⁶⁵ 47 C.F.R. § 25.2110(c)(2)(ii)(A).

⁵⁶⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3865 (para. 52), citing 47 C.F.R. § 73.5008(c); *Broadcast New Entrant Credit Order*, 14 FCC Rcd 12541.

⁵⁶⁷ 47 C.F.R. § 1.2110(b)(2).

⁵⁶⁸ 47 C.F.R. § 1.2110(c)(2)(ii)(A).

processing round from purchasing the spectrum rights of another NGSO-like licensee in that processing round. A licensee with five pending GSO-like applications or unbuilt satellites in a frequency band, however, would not be allowed to acquire a license for another GSO-like satellite in that band. Similarly, in a merger transaction, the resulting entity would be required to abandon some of its pending applications if it exceeds the applicable limits.

5. Selling Place in Queue

240. *Background.* The Commission proposed prohibiting applicants from allowing other entities to assume their place in any queue.⁵⁶⁹ The Commission explained that, without this prohibition, it is possible that some parties would file satellite applications simply to obtain a place in a queue to sell to another party willing and able to implement its proposed satellite system.⁵⁷⁰

241. *Discussion.* Hughes notes that the Commission also proposed to eliminate the anti-trafficking rule, and argues that it is inconsistent to prohibit sales of places in the queue while eliminating the anti-trafficking rule.⁵⁷¹ Teledesic argues that the arguments in favor of eliminating the anti-trafficking rule also support allowing the sale of places in the queue.⁵⁷² Teledesic also questions whether this safeguard is necessary if the first-come, first-served approach enables the Commission to act on applications as quickly as Teledesic expects.⁵⁷³ SES Americom claims that allowing applicants to sell their place in line would facilitate speculation.⁵⁷⁴

242. We prohibit applicants from transferring their places in the queue. As the Commission explained in the *Notice*, without this prohibition, it is possible that some parties would file satellite applications simply to obtain a place in a queue to sell to another party willing and able to implement its proposed satellite system.⁵⁷⁵ Accordingly, we must adopt this safeguard to avoid facilitating speculation.

243. Contrary to Hughes's contention, this decision is consistent with our decision above to eliminate the anti-trafficking rule. In the case of a license sale, the Commission has reviewed the licensee's application, and has determined that the licensee is qualified to hold a satellite license. In the case of a sale of a place in the queue, however, the Commission has not yet reviewed the application or reached any conclusion regarding the applicant's qualifications. There would be no way to determine whether the application is substantially complete, or filed merely to obtain a place in line to try to sell to other parties. By requiring applicants to demonstrate their qualifications before they are permitted to offer any spectrum rights or potential

⁵⁶⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3865-66 (para. 53).

⁵⁷⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3865-66 (para. 53).

⁵⁷¹ Hughes Comments at 29-31, 50.

⁵⁷² Teledesic Comments at 29-31.

⁵⁷³ Teledesic Comments at 29.

⁵⁷⁴ SES Americom Reply at 17-18.

⁵⁷⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3865-66 (para. 53).

spectrum rights for sale, it is more likely that the applicant intends to construct the satellite system for which it has applied. Thus, we decrease the likelihood that the applicant has sought a license merely for speculation.

6. Hard Look Doctrine

244. In the *Notice*, the Commission emphasized that it requires satellite applications to be substantially complete when they are filed.⁵⁷⁶ The Commission reasoned further that any relaxation of the requirement that satellite applicants submit substantially complete applications could encourage speculative applications.⁵⁷⁷ The Commission also observed that it relied on a substantially complete application requirement to deter speculative applications in its broadcast first-come, first-served procedure.⁵⁷⁸ None of the commenters responded to this discussion in the *Notice*. Here, we find that continuing to require substantially complete satellite applications will also continue to provide some additional protection against speculative satellite applications.

F. Mandatory Electronic Filing of Space Station Applications

245. *Background.* In the *Notice*, we requested comment on requiring most satellite applicants to file license applications electronically.⁵⁷⁹ We observed that electronically filed earth station applications can be processed in about half the time as paper earth station applications.⁵⁸⁰ In addition, we assumed that Internet access has become sufficiently common that few if any U.S.-licensed satellite operators will be disadvantaged by mandatory electronic filing.⁵⁸¹ In addition, the Commission observed that mandatory electronic filing would facilitate a first-come, first-served procedure, by enabling the Commission to record application filing times to the nearest thousandth of a second.⁵⁸²

246. *Discussion.* Intelsat supports mandatory electronic filing so that we can place applications in the queue based on the date and time of filing.⁵⁸³ SIA advocates mandatory electronic filing, noting that it expedites Commission review of earth station applications,

⁵⁷⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3875 (para. 84).

⁵⁷⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3878 (para. 93).

⁵⁷⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3878 n.123, citing *TV and FM Broadcast Order*, 50 Fed. Reg. at 19939-40 (paras. 19-24).

⁵⁷⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 118). The Commission proposed mandatory electronic filing for all satellite applicants except DBS and DARS applicants. *Space Station Reform NPRM*, 17 FCC Rcd at 3850 n.4.

⁵⁸⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 118), citing *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25153 (para. 76).

⁵⁸¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3886 (para. 118).

⁵⁸² See *Space Station Reform NPRM*, 17 FCC Rcd at 3862-63 (para. 45).

⁵⁸³ Intelsat Comments at 12.

including, on occasion, 100-page long applications.⁵⁸⁴ Hughes argues, however, that the Commission should allow, but not mandate, electronic filing. Hughes maintains that space station applications are complex and cannot be handled routinely as many earth station applications can. Therefore, Hughes doubts whether mandatory electronic filing for space station applications would yield time savings comparable to electronic filing for earth station applications.⁵⁸⁵ Hughes further contends that an electronic filing system might not handle hybrid satellite applications or "unusual" applications very well.⁵⁸⁶

247. We adopt our proposal to require space station applications to be filed electronically. The Commission requires mandatory electronic filing in other areas,⁵⁸⁷ including requests for special temporary authority (STA) for wireless telecommunications services.⁵⁸⁸ Furthermore, the International Bureau Filing System (IBFS) can record filing times to the nearest thousandth of a second. Thus, mandatory electronic filing will facilitate the first-come, first-served procedure for GSO-like satellite systems, without giving any particular applicant an advantage over any other applicant.⁵⁸⁹ In fact, as the Commission explained in the *Notice*, a mandatory electronic filing requirement for satellite applications is potentially more fair to all potential applicants than a process that permits paper applications.⁵⁹⁰ This is because paper applications must be submitted to the Commission in person or by mail, and these procedures clearly disadvantage applicants located outside of Washington, D.C. None of the commenters in this proceeding questioned this statement. Moreover, we specifically invited commenters to

⁵⁸⁴ SIA Comments at 18.

⁵⁸⁵ Hughes Comments at 51-52.

⁵⁸⁶ Hughes Comments at 51-52.

⁵⁸⁷ See Wireline Competition Bureau Initiates Electronic Filing of Automated Reporting Management Information System (ARMIS) Data and Associated Documents By Incumbent Local Exchange Carriers, *Public Notice*, 18 FCC Rcd 3245 (Wireline Comp. Bur., 2003); Amendment of the Commission's Rules for Implementation of its Cable Operations And Licensing System (COALS) to Allow for Electronic Filing of Licensing Applications, Forms, Registrations and Notifications in the Multichannel Video and Cable Television Service and the Cable Television Relay Service, *Report and Order*, CS Docket No. 00-78, FCC No. 03-55 (released Mar. 19, 2003); Wireless Telecommunications Bureau (WTB) Extends Mandatory Electronic Filing Date for Microwave Licensees to Coincide with Availability of Electronic Filing Via the Internet, *Public Notice*, 15 FCC Rcd 15692 (Wireless Tel. Bur., 2000); 1998 Biennial Review – Streamlining of Mass Media Applications, Rules and Processes, *Report and Order*, MM Docket No. 98-43, 13 FCC Rcd 23056, 23060 (para. 8) (1998); Electronic Tariff Filing System (ETFS), *Order*, 13 FCC Rcd 12335 (Com. Car. Bur. 1998).

⁵⁸⁸ 47 C.F.R. § 1.931(a).

⁵⁸⁹ The Internet is a packet-switching network, which splits up data into "packets." Each router in the network calculates the best routing for a packet at a particular moment, given current traffic patterns, rather than transmitting over a dedicated end-to-end transmission path. If congestion arises at a particular point in the network, an almost infinite array of alternative paths could be employed without the user knowing it. *Digital Tornado: The Internet and Telecommunications Policy*, OPP Working Paper No. 29 ((Mar. 1997) at 1-3; *Internet Over Cable: Defining the Future in Terms of the Past*, OPP Working Paper No. 30 (Aug. 1998) at 13-15. Thus, if applicants in Washington, DC and California submit a satellite application at the same time, it is possible that the California application will reach the Commission first.

⁵⁹⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3862-63 (para. 45).

discuss whether basing priority on thousandths of a second might disadvantage applicants based further away from Washington, D.C. because of the time needed to route applications through the Internet.⁵⁹¹ None of the parties address this issue.

248. We are sympathetic to Hughes's concerns about "unusual" satellite applications, but we are confident that our electronic filing system can accept unusual satellite applications without any problem. We have accepted electronically filed space station applications for several years now. That experience has enabled us to refine our electronic filing system as needed. As SIA observes, our electronic filing system can accept 100-page long earth station applications.⁵⁹² Furthermore, 70 percent of the satellite applications filed in 2002 were electronic. Therefore, we conclude that our electronic filing system will be sufficient to support our satellite application mandatory electronic filing requirement. In the unlikely event that an applicant brings to our attention any problems with filing an unusual application, we will work to resolve those problems.

249. Although we agree with Hughes that we do not have "routine" processing standards for space station applications, we find that mandatory electronic filing is still warranted to facilitate our first-come, first-served procedure for GSO-like satellite applications.⁵⁹³ The first-come, first-served procedure will enable us to act on GSO-like satellite applications much faster than is now possible,⁵⁹⁴ and this procedure will be expedited further if we minimize the number of satellite applications that must be considered simultaneously.⁵⁹⁵ Thus, mandatory electronic filing will expedite our actions on satellite applications, regardless of whether we can process any satellite applications "routinely."

G. Replacement Satellites

1. Streamlined Procedure

250. *Background.* In the *Notice*, we explained our replacement satellite policy for GSO satellites.⁵⁹⁶ Given the huge costs of building and operating GSO space stations, we have found

⁵⁹¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3862-63 (para. 45).

⁵⁹² SIA Comments at 18.

⁵⁹³ *See Space Station Reform NPRM*, 17 FCC Rcd at 3862-63 (para. 45). *See also* Intelsat Comments at 12.

⁵⁹⁴ Section VI.B.

⁵⁹⁵ *See* Teledesic Comments at 22-24.

⁵⁹⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 119). We have a different policy for replacements of satellites in NGSO constellations. Generally, NGSO authorizations cover all construction and launches necessary to implement the complete constellation and to maintain it until the end of the license term, including any replacement satellites necessitated by launch or operational failure, or by retirement of satellites prior to the end of the license period. All replacement satellites must be technically identical to those in service, including the same frequency bands and orbital parameters, and may not cause a net increase in the number of operating satellites in the authorized orbital planes or an additional orbital plane. *See* Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, *Report and Order*, CC Docket No. 92-166, 9 FCC Rcd 5936, 6006 (para. 182) (1994) (*Big LEO Order*); The Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit, Fixed Satellite Service in the Ku-band, *Report and*

that there should be some assurance that operators will be able to continue to serve their customers.⁵⁹⁷ Therefore, the Commission has stated that, when an orbit location remains available for a U.S. satellite with the technical characteristics of the proposed replacement satellite, it will generally authorize the replacement satellite at the same location.⁵⁹⁸ It has also acted on applications for replacement satellites as they are filed, without consolidating them into a processing group.⁵⁹⁹

251. The Commission usually acts on replacement satellite applications in Orders, however. We requested comment on two alternatives for streamlining this process. First, we proposed grant-stamping unopposed replacement satellite applications with technical characteristics consistent with those of the satellite to be retired.⁶⁰⁰ We stated that this process would be similar to that we use for unopposed earth station applications. We would simply stamp the application as "granted" and return a copy to the applicant.⁶⁰¹

252. As an alternative, we proposed deeming unopposed replacement satellite applications granted after a specific amount of time after the date for petitions to deny has passed, unless we issue a public notice stating that we need more time to review the application.⁶⁰² Under this proposal, once we have decided to allow the application to be deemed granted, we would issue a public notice announcing that fact.⁶⁰³ The Commission noted that it used a similar procedure for certain international Section 214 applications, and for certain submarine cable landing license applications.⁶⁰⁴ We also invited comment on the timing of such grants and suggested a "deemed granted" date of at least 60 days after the date for filing petitions to deny.⁶⁰⁵

Order and Further Notice of Proposed Rulemaking, IB Docket No. 01-96, 17 FCC Rcd 7841, 7861-62 (para. 68) (2002).

⁵⁹⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 119), citing Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, *Memorandum Opinion and Order*, 3 FCC Rcd 6972, 6976 n.31 (1988) (*1988 Orbit Assignment Order*); Hughes Communications Galaxy, Inc., *Order and Authorization*, 6 FCC Rcd 72, 74 n.7 (1991) (*Hughes Replacement Order*); GE American Communications, Inc., *Order and Authorization*, 10 FCC Rcd 13775, 13775-76 (para. 6) (Int'l Bur. 1995) (*GE Americom Replacement Order*).

⁵⁹⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 119), citing *1988 Orbit Assignment Order*, 3 FCC Rcd at 6976 n.31; *GE Americom Replacement Order*, 10 FCC Rcd at 13775-76 (para. 6).

⁵⁹⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 119), citing *GE Americom Replacement Order*, 10 FCC Rcd at 13775-76 (para. 6); Loral Spacecom Corp., *Order and Authorization*, 13 FCC Rcd 16348, 16440 (para. 5) (Int'l Bur., Sat. and Rad. Div., 1995).

⁶⁰⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 120).

⁶⁰¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 120).

⁶⁰² *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 120).

⁶⁰³ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 120).

⁶⁰⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 n.159.

⁶⁰⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 120).

253. *Discussion.* Hughes and Teledesic support grant-stamping unopposed replacement satellite applications.⁶⁰⁶ SIA and Intelsat support the "deem granted" proposal.⁶⁰⁷ PanAmSat supports both alternatives, but it prefers the deemed granted procedure because the public notice would make it easier for the public to keep track of the Commission's satellite licensing actions.⁶⁰⁸ We adopt the "grant-stamp" proposal. We have used the grant-stamp procedure for unopposed earth station applications, and find that this experience is more comparable to space station applications than the international Section 214 applications and cable landing license applications subject to a "deemed granted" procedure. Nevertheless, we are sensitive to PanAmSat's concerns about keeping track of the Commission's satellite licensing actions. Accordingly, we will issue public notices announcing when we have grant-stamped unopposed replacement satellite applications.

254. Intelsat asserts that a petition to deny a replacement satellite application should not render the application ineligible for a "deemed granted" procedure.⁶⁰⁹ SES Americom contends that the Communications Act requires that any "deemed granted" procedure should be limited to uncontested applications.⁶¹⁰ We have traditionally addressed petitions to deny satellite applications in the context of an Order, so that we could provide a reasoned explanation for denying or granting the petition to deny. Intelsat has not persuaded us to depart from this policy.

2. Technical Characteristics of Replacement Satellites

255. *Background.* In the *Notice*, the Commission proposed making the streamlined procedure for replacement satellites available for applications for replacement satellites with technical characteristics consistent with those of the satellite to be retired.⁶¹¹

256. *Pleadings.* Several commenters ask the Commission to explain in more detail the extent to which replacement satellites must be technically consistent with the satellites they are intended to replace for purposes of the replacement satellite policy.⁶¹² For example, these commenters argue that satellite operators should be allowed to increase power from one generation of satellites to the next without losing their replacement expectancy.⁶¹³ They further

⁶⁰⁶ Hughes Comments at 51; Teledesic Comments at 44.

⁶⁰⁷ SIA Comments at 39-41; Intelsat Comments at 21-23.

⁶⁰⁸ PanAmSat Comments at 13-14.

⁶⁰⁹ Intelsat Comments at 22.

⁶¹⁰ SES Americom Reply at 18, *citing* 47 U.S.C. § 309(d)(2).

⁶¹¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3887 (para. 120).

⁶¹² SIA Comments at 40-41; Intelsat Comments at 22-23; PanAmSat Comments at 14-15; PanAmSat Reply at 4; SES Americom Reply at 23. *See also* Hughes Comments at 51.

⁶¹³ SIA Comments at 40-41; Intelsat Comments at 22-23; PanAmSat Comments at 14-15; PanAmSat Reply at 4; SES Americom Reply at 23.

contend that satellite operators should be allowed to expand their coverage areas.⁶¹⁴ Finally, these parties request that the Commission allow replacement satellite applications to include "expansion frequency" requests, such as a request for authority to operate in extended Ku-band frequencies when the existing satellite license includes conventional Ku-band authority.⁶¹⁵

257. *Discussion.* When we stated in the *Notice* that we would use a streamlined licensing process for replacement satellites that are technically consistent with the satellites they are replacing, we did not intend to require the satellites to be technically identical. We do not require replacement satellites to be technically *identical* to the existing satellite.⁶¹⁶ We recognize that next-generation satellites will incorporate satellites with technical advancements made since the previous generation satellite was launched. We do not intend to change this policy, which facilitates state-of-the-art systems. Rather, we will continue to assess only whether operations of the replacement satellite will be consistent with our international coordination obligations pursuant to regulations promulgated by the International Telecommunication Union.⁶¹⁷ Thus, we will continue to consider applications for replacement satellites with higher power capabilities relative to the applicant's existing satellites.⁶¹⁸

258. In the past, we have considered applications for replacement satellites with greater coverage areas than the original satellites.⁶¹⁹ We have also considered requests for replacement conventional C-band or Ku-band satellites seeking authority to operate in the extended C-band or extended Ku-band, respectively.⁶²⁰ We find, however, that we must revisit these aspects of our replacement satellite policy in light of our new first-come, first-served procedure. Under our new procedure, parties are free to apply for licenses to operate only in the extended C-band or

⁶¹⁴ SIA Comments at 40-41; Intelsat Comments at 22-23; PanAmSat Comments at 14-15; PanAmSat Reply at 4; SES Americom Reply at 23.

⁶¹⁵ SIA Comments at 40-41; Intelsat Comments at 22-23; PanAmSat Comments at 14-15; PanAmSat Reply at 4; SES Americom Reply at 23. SIA recommends limiting this "expansion frequency" policy to frequencies that are not shared between GSO and NGSO satellite operators, such as the Ka-band. SIA Comments at 41 n.95.

⁶¹⁶ See *Space Station Reform NPRM*, 17 FCC Rcd at 3888 n.160, and sources cited therein.

⁶¹⁷ See *Hughes Communications Galaxy, Inc., Order and Authorization*, 6 FCC Rcd 72, 74 n.7 (1991) (*Hughes Replacement Order*); cited in *Space Station Reform NPRM*, 17 FCC Rcd at 3887 n.158.

⁶¹⁸ See *American Telephone and Telegraph Company, Order and Authorization*, 10 FCC Rcd 12132, 13133 (para. 7) (Int'l Bur. 1995) (authorizing replacement satellite capable of operating in a "'non-routine' high power mode," but cautioning licensee that it is responsible for coordinating the higher power with adjacent satellite operators). See also *Hughes Communications Galaxy, Inc., Memorandum Opinion and Order*, 5 FCC Rcd 1653 (Com. Car. Bur. 1990) (granting modification of replacement satellite license to increase transponder amplifier power).

⁶¹⁹ See *Application of Columbia Communications Corporation for Modification of Authorization to Permit Operation of Ku-band Satellite Capacity on the Columbia 515 Satellite Located at 37.7° West Longitude, Memorandum Opinion and Order*, 16 FCC Rcd 12480, 12483-84 (para. 9) (Int'l Bur. 2001).

⁶²⁰ PanAmSat Licensee Corporation, *Application for Authority to Launch and Operate a Hybrid Replacement Fixed Satellite Service Space Station, Order and Authorization*, 15 FCC Rcd 22156, 22157-58 (para. 5) (Int'l Bur., Sat. and Rad. Div., 2000).

extended Ku-band at a particular orbit location if no one has previously been authorized to provide that service. It would be contrary to the public interest to preclude a party from providing such a service merely because a current licensee might request that authority in a future replacement satellite application. We will consider replacement satellite applications that request greater coverage areas and/or extended band authority, but only if no other applicants have been licensed to provide those services. In other words, satellite operators may request such operating authority, but this authority is not included in their replacement expectancies.

H. Full Frequency Reuse

259. *Background.* In the *Notice*, we stated that our two-degree-spacing policy⁶²¹ for GSO satellite systems includes full frequency reuse requirements.⁶²² Currently, the full frequency reuse requirements require FSS satellite operators to use both vertical and horizontal polarization.⁶²³ Essentially, full frequency reuse doubles the capacity of a space station. Thus, our full frequency reuse requirements are important for ensuring that scarce orbit and spectrum resources are used efficiently.⁶²⁴

260. Our full frequency reuse policy for GSO satellites operating in the conventional C-band and Ku-band⁶²⁵ is codified in Sections 25.210(e), (f), and (g) of our rules.⁶²⁶ We proposed clarifications to these rules in the *Notice*. First, we proposed clarifying that these requirements apply to the conventional C-band and Ku-band.⁶²⁷ Second, we proposed revising Section 25.210(f) based on the language we used for Ka-band full frequency reuse requirements in

⁶²¹ Part 25 includes several "2° spacing" requirements for geostationary satellite orbit satellites. The Commission instituted its 2° orbital spacing policy in 1983 to maximize the number of satellites in orbit. Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, *Report and Order*, CC Docket No. 81-704, FCC 83-184, 54 Rad. Reg. 2d 577 (released Aug. 16, 1983); *reprinted at* Licensing Space Stations in the Domestic Fixed-Satellite Service, 48 F.R. 40233 (Sept. 6, 1983) (*Two Degree Spacing Order*). Under the 2° spacing framework, the Commission assigns adjacent in-orbit co-frequency satellites to orbit locations 2° apart in longitude. *Space Station Reform NPRM*, 17 FCC Rcd at 3879 (para. 95), *citing Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25132 (para. 7).

⁶²² *Space Station Reform NPRM*, 17 FCC Rcd at 3879 (para. 96).

⁶²³ "For fixed-satellite space stations providing domestic service, full frequency re-use is defined as re-use of the frequency bands by polarization discrimination in both the uplink and downlink directions using state-of-the-art equipment and techniques." 47 C.F.R. § 25.210(f).

⁶²⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3879 (para. 96), *citing* Systematics General Corporation, *Memorandum Opinion and Order*, 103 FCC 2d 879, 881-82 (paras. 6-9) (1985); Columbia Communications Corporation, *Memorandum Opinion, Order, and Authorization*, 7 FCC Rcd 122, 123 (para. 15) (1991); *First Columbia Milestone Order*, 15 FCC Rcd at 15572 (para. 13).

⁶²⁵ The conventional Ku-band is the 11.7-12.2 GHz and 14.0-14.5 GHz bands.

⁶²⁶ 47 C.F.R. §§ 25.210(e), (f), (g). Section 25.210(e) creates the full frequency reuse requirement for GSO FSS space stations. Section 25.210(f) defines full frequency reuse for domestic satellite service, and Section 25.210(g) defines full frequency reuse for international satellite service.

⁶²⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3879-80 (para. 97).

Section 25.210(d).⁶²⁸ Specifically, we proposed revising Section 25.210(f) to read as follows: "All space stations in the Fixed Satellite Service in the 3700-4200 MHz, 5925-6425 MHz, 11.7-12.2 GHz, and 14.0-14.5 GHz bands shall employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the same beam and/or the use of spatially independent beams."⁶²⁹ We asked whether this proposal effectively takes account of the current state of the art in satellite technology and expected future developments.⁶³⁰ We also asked whether we should apply these full frequency reuse requirements to extended C-band and extended Ku-band satellites.⁶³¹

261. *Discussion.* Teledesic supports the Commission's proposal to clarify its full frequency reuse policies.⁶³² Teledesic agrees that the Commission should revise Section 25.210(f) based on the language it used for Ka-band full frequency reuse requirements in Section 25.210(d).⁶³³ No one opposed this proposal.

262. We hereby adopt all the revisions to the full frequency reuse rules that were proposed in the *Notice*. When we adopted full frequency reuse requirements for Ka-band GSO satellite systems, we noted that new satellites are capable of generating multiple narrow-beam spot beams.⁶³⁴ We also noted that such space stations reuse frequencies in spatially independent beams rather than by using orthogonally polarized signals within a single beam.⁶³⁵ By revising Section 25.210(f), we encourage deployment of new, technologically innovative spot-beam satellites in the C-band and Ku-band.⁶³⁶

263. We also conclude that GSO satellite operations in the extended C- and Ku-bands should be subject to full frequency reuse requirements as well. There is no policy justification for

⁶²⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3879-80 (para. 97), *citing* 47 C.F.R. §25.210(d). The term "Ka-band" generally refers to the space-to-earth (downlink) frequencies at 17.7-20.2 GHz and the corresponding earth-to-space (uplink) frequencies at 27.5-30.0 GHz.

⁶²⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3879-80 (para. 97).

⁶³⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3879-80 (para. 97).

⁶³¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3879-80 (para. 97).

⁶³² Teledesic Comments at 40-41.

⁶³³ Teledesic Comments at 40-41.

⁶³⁴ *Ka-Band Service Rules Order*, 12 FCC Rcd at 22321-22 (para. 28).

⁶³⁵ *Ka-Band Service Rules Order*, 12 FCC Rcd at 22321-22 (para. 28).

⁶³⁶ When the Commission first adopted full frequency reuse requirements, the requirement was defined in terms of minimum use of bandwidth allocated to the service. For example, a space station operating in the conventional C-band was required to have a capacity equivalent to that provided by a space station having transponders that use 864 MHz of a 1000 MHz (with two-times frequency reuse) assignment and provide a total power of 192 watts. *See Space Station Reform NPRM*, 17 FCC Rcd at 3879 (para. 96), *citing Two-Degree Spacing Order*, 54 RR 2d at 598 n.67; *Separate Systems Order*, 101 FCC 2d at 1168-69 (para. 248). Here, we emphasize that we now define full frequency reuse in terms of use of dual polarization, not minimum bandwidth usage.

allowing satellite operators to operate inefficiently, without full frequency reuse, in extended bands. Therefore, we will revise Section 25.210(f) to include the extended C- and Ku-bands.

264. SES Americom recommends revising Section 25.210(e) to be consistent with Section 25.210(d), and our proposed revisions Section 25.210(f).⁶³⁷ Section 25.210(f) establishes full frequency reuse requirements for all conventional and extended C-band and Ku-band satellite services. Therefore, rather than revise Section 25.210(e) as SES Americom recommends, we remove it from Part 25. Similarly, we remove Section 25.210(g) as unnecessary in light of our revisions to Section 25.210(f).

I. Miscellaneous

1. Space Station License Terms

265. *Background.* Together with the *Notice*, the Commission adopted a *First Report and Order* in another proceeding, in which it adopted rules to enable it to issue space station and earth station licenses with 15-year terms, an increase from the 10-year terms in the previous rules.⁶³⁸ The Commission stated that the new earth station license term rule applies only to earth station licenses granted after the new rules take effect.⁶³⁹ The Commission did not state clearly whether existing space station licenses were subject to the revised rule.⁶⁴⁰

266. *Discussion.* SIA argues that the terms of existing satellite licenses should be extended to 15 years, to be consistent with the license terms of satellites granted under the revised rules.⁶⁴¹ We find that the license terms of existing space station licenses should be extended to 15 years. We did not adopt this proposal for earth station licenses because it would be potentially burdensome for licensees and the Commission to reissue thousands of earth station licenses.⁶⁴² This reason does not apply to space station licenses, which number in the dozens. Accordingly, we adopt SIA's proposal. All space station licenses are deemed automatically modified by extending the license term of the satellite, or satellite constellation in the case of NGSO systems, an additional five years, to 15 years, from the date the first satellite is successfully placed into orbit.

267. We also revise Section 25.121(e). Currently, Section 25.121(e) requires NGSO satellite licensees requesting replacement authority for next-generation satellites to file their applications about eight years after the beginning of the license term of the current-generation system.⁶⁴³ As a logical outgrowth of our decision to extend the license term for all satellite

⁶³⁷ SES Americom Comments at 9-10.

⁶³⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3894-96 (paras. 139-43).

⁶³⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3895 (para. 142).

⁶⁴⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3895-96 (para. 143).

⁶⁴¹ SIA Comments at 22.

⁶⁴² *Space Station Reform NPRM*, 17 FCC Rcd at 3895 (para. 142).

⁶⁴³ "Applications for space station system replacement authorization for non-geostationary orbit satellites shall be filed no earlier than 90 days, and no later than 30 days, prior to the end of the seventh year of the existing license term." 47 C.F.R. § 25.121(e).

licensees, we also extend the deadline for all NGSO licensees to file their replacement satellite applications until about two years before the end of their 15-year license terms, as extended in this Order.

2. Spectrum Reallocations

268. *Background.* In the *Notice*, the Commission proposed a procedure to expedite reassignment of licenses to other satellite operators if the licensee loses its license for any reason.⁶⁴⁴ CTIA recommends extending that concept. For example, if an initial group of satellite licensees does not make sufficient progress in constructing their systems, CTIA recommends that the Commission stop considering additional applications pending reallocation of the spectrum to another service.⁶⁴⁵ CTIA suggests that the Commission consider reallocating satellite spectrum to another service whenever no "credible" satellite license application is filed within a year of the time the spectrum is allocated to satellite service.⁶⁴⁶ CTIA also recommends considering reallocating satellite spectrum to another service whenever a satellite license is revoked.⁶⁴⁷

269. SES Americom argues that CTIA's proposals are inconsistent with sound spectrum policy.⁶⁴⁸ Several commenters point out that the Table of Frequency Allocations is based on long-term spectrum planning and should not be altered because some operators have tried and failed to provide service.⁶⁴⁹ ICO argues that CTIA's proposals would have eliminated DBS, cellular, UHF, and FM services if they were applied to those services.⁶⁵⁰ PanAmSat also contends that this proposal is beyond the scope of this proceeding.⁶⁵¹

270. *Discussion.* We will not adopt CTIA's proposals. Adopting CTIA's proposals would be equivalent to assuming that spectrum should be reallocated whenever a single satellite operator or group of operators fails to meet a milestone, or whenever satellite license applicants do not meet CTIA's proposed credibility standard. Under our current procedure, when we decide to allocate spectrum to a particular use, we base our decision on specific principles and policy goals.⁶⁵² These goals are not thwarted because particular satellite licensees are unable to move

⁶⁴⁴ See *Space Station Reform NPRM*, 17 FCC Rcd at 3860 (para. 34).

⁶⁴⁵ CTIA Comments at 6-7.

⁶⁴⁶ CTIA Comments at 8.

⁶⁴⁷ CTIA Comments at 8.

⁶⁴⁸ SES Americom Reply at 19-21.

⁶⁴⁹ SES Americom Reply at 20; PanAmSat Reply at 5; ICO Reply at 5-6.

⁶⁵⁰ ICO Reply at 6-8.

⁶⁵¹ PanAmSat Reply at 4-5.

⁶⁵² Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, *First Order on Reconsideration*, IB Docket No. 98-172, 16 FCC Rcd 19808, 19811 (para. 6) (2001) ("Based on the extensive record in the proceeding, on June 8, 2000, the Commission adopted the *18 GHz Order* that made several important decisions with the goal of permitting more efficient use of the radio spectrum for existing and future operators and facilitating deployment of new services in the band.")

forward. Furthermore, CTIA's proposed automatic mechanism to initiate a spectrum reallocation proceeding when a satellite licensee fails to go forward limits our flexibility to determine how the public interest will be best served. In cases where reallocating spectrum from one service to another would further the public interest, we can reallocate that spectrum in a rulemaking proceeding.⁶⁵³ In addition, if we adopted an automatic mechanism for reallocating spectrum when satellite operators fail to meet a milestone, without another mechanism for reallocating spectrum in cases where other operators in other services fail to meet milestones, we would be declaring by government fiat that other services provide a higher and better use of spectrum than satellite service under all circumstances.

3. Special Temporary Authority

271. *Background.* SIA requests that we specify in the rules the extent to which we will grant applicants special temporary authority (STA) without placing the STA request on public notice.⁶⁵⁴ SIA further recommends treating STA requests as granted as of seven business days after they are filed for STA requests less than 30 days, or five business days after the end of the public notice period for STA requests greater than 30 days.⁶⁵⁵

272. *Discussion.* We adopt SIA's proposal to revise the Commission's rules to spell out more completely the requirements for STAs. These requirements are now set forth in Section 309 of the Communications Act. Section 309(c)(2)(G) governs STA requests that are not placed on public notice.⁶⁵⁶ Under that provision, the Commission may grant STAs for no more than 30 days in cases where an application for regular authority is not contemplated, or for 60 days otherwise. Under Section 309(f), the Commission may grant STA requests for up to 180 days if they are placed on public notice.⁶⁵⁷ In this Order, we revise Section 25.120 of our rules to include these provisions.⁶⁵⁸

273. We will not adopt rules that automatically grant an STA request if we do not act on the request within a certain number of days, however. In other cases where we have allowed filings by regulated companies to take effect after a certain number of days, the procedure was established by the Communications Act,⁶⁵⁹ or we adopted safeguards sufficient to ensure that allowing the filing to take effect would not be inconsistent with the public interest.⁶⁶⁰ SIA's proposal does not

⁶⁵³ See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, GN Docket No. 01-74, 17 FCC Rcd 1022 (2002).

⁶⁵⁴ SIA Comments at 21-22.

⁶⁵⁵ SIA Comments at 21-22.

⁶⁵⁶ 47 U.S.C. § 309(c)(2)(G).

⁶⁵⁷ 47 U.S.C. § 309(f).

⁶⁵⁸ 47 C.F.R. § 25.120.

⁶⁵⁹ 47 U.S.C. § 204(a)(3) (common carrier tariff filings are "deemed lawful" unless Commission takes action within specified time).

⁶⁶⁰ See 1998 Biennial Regulatory Review -- Review of International Common Carrier Regulations, *Report and Order*, IB Docket No. 98-118, 14 FCC Rcd 4909, 4913-14 (para. 12) (1999) (the

include any such safeguards. In addition, the Communications Act specifies that we grant STAs only when there are "extraordinary circumstances."⁶⁶¹ There is nothing in the Communications Act that suggests that Congress contemplated allowing STA requests to be routinely granted. Moreover, in emergency cases, the Commission can grant STAs orally, to be memorialized later by letter.⁶⁶²

4. Petitions for Reconsideration

274. Teledesic proposes a stamp-based procedure for denying meritless petitions for reconsideration.⁶⁶³ Teledesic does not propose a definition for "meritless." We see no need to adopt this procedure at this time, especially with no dividing line between "meritless" petitions and other petitions. In addition, this proposal seems unnecessary. If a petition for reconsideration truly has no merit, it can be dismissed in a timely manner under the Commission's current procedure.⁶⁶⁴ This is particularly true for petitions for reconsideration that do not raise any new arguments.⁶⁶⁵

5. Pending Satellite Applications

275. There are several satellite license applications currently pending before the Commission, including applications for NGSO and GSO satellites that would operate in the V-band,⁶⁶⁶ and for NGSO satellites that would operate in the Ka-band.⁶⁶⁷ For reasons set forth in this

class of international Section 214 applications that qualify for streamlined treatment are subject to regulations and safeguards sufficient to prevent anticompetitive effects in the U.S. market).

⁶⁶¹ 47 U.S.C. § 309. Convenience to the applicant, such as marketing considerations or meeting scheduled customer in-service dates, will not be deemed sufficient for this purpose. 47 C.F.R. § 25.120(b).

⁶⁶² See Letter from Jennifer M. Gilsenan, Chief, Policy Branch, Satellite Division, International Bureau, to Nancy J. Eskinazi, Vice President and Associate General Counsel, SES Americom, Inc. (dated June 25, 2002) (memorializing oral STA grant to relocate satellite from 79° W.L. to 37.5° W.L.).

⁶⁶³ Teledesic Comments at 44-46.

⁶⁶⁴ See *Texcom, Inc., d/b/a Answer Indiana, Complainant, v. Bell Atlantic Corp., d/b/a Verizon Communications, Defendant, Order on Reconsideration*, 17 FCC Rcd 6275 (2002); *Joy Public Broadcasting Corporation, Radio Station WJTF-FM, Panama City, Florida, Memorandum Opinion and Order*, 16 FCC Rcd 11971 (Enf. Bur. 2001); *Applications of Warren Price Communications, Inc., Memorandum Opinion and Order*, MM Docket No. 87-246, 7 FCC Rcd 6850 (1992) (examples of dismissals of petitions for reconsideration because they had no merit).

⁶⁶⁵ See 47 C.F.R. § 1.106(b)(3).

⁶⁶⁶ The Commission adopted the current band plan for non-government operations in the V-band in December 1998. Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz, and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations, *Report and Order*, IB Docket No. 97-95, 13 FCC Rcd 24649 (1998) (*36-51 GHz Order*), *aff'd* 15 FCC Rcd 1766 (1999) (*36-51 GHz Reconsideration Order*). The Commission is currently considering revising these allocations. See Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz, and 48.2-50.2 GHz Frequency Bands; Allocation

section below, we will apply the rules and procedures we adopt in this Order to pending applications, in cases where doing so will help further the goals of this proceeding to expedite service to the public and discourage speculation.

276. The Commission is allowed to apply new procedures to pending applications under limited circumstances. Specifically, the Commission can apply new procedures to pending applications if doing so does not impair the rights an applicant possessed when it filed its application, increase an applicant's liability for past conduct, or impose new duties on applicants with respect to transactions already completed.⁶⁶⁸ Applying our new procedures to pending satellite applications as discussed below would not have any of these results.

277. Applying new procedures to pending satellite applications would not impair the rights that any applicant possessed when it filed its application, nor impose any new duty with respect to a transaction already completed. Courts have explained that applicants do not gain any vested right merely by filing an application.⁶⁶⁹ Similarly, merely filing an application cannot be considered a "transaction already completed" for purposes of this analysis. In addition, the pending applications were filed under the current processing round procedures described in this Order above.⁶⁷⁰ The current processing round procedure included the fungibility policy eliminated in the Order above.⁶⁷¹ Thus, at the time applicants filed their applications, they had no reasonable basis for assuming that they would receive the operating authority they requested, or that they

of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations, *Further Notice of Proposed Rulemaking*, IB Docket No. 97-95, 16 FCC Rcd 12244 (2001) (*36-51 GHz Further Notice*).

⁶⁶⁷ For more on Ka-band NGSO service, see The Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit, Fixed-Satellite Service in the Ka-Band, *Notice of Proposed Rulemaking*, IB Docket No. 02-19, 17 FCC Rcd 2807 (2002) (*Ka-band NGSO NPRM*).

⁶⁶⁸ *DirecTV, Inc., v. FCC*, 110 F.3d 816, 825-26 (D.C. Cir., 1997) (*DirecTV*); *Landgraf v. USI Film Products*, 511 U.S. 244, 280 (1994) (*Landgraf*).

⁶⁶⁹ *Chadmoore Communications, Inc. v. FCC*, 113 F.3d 235, 240-41 (D.C. Cir. 1997) (*Chadmoore*) ("In this case the Commission's action did not increase [the applicant's] liability for past conduct or impose new duties with respect to completed transactions. Nor could it have impaired a right possessed by [the applicant] because none vested on the filing of its application."); *Hispanic Info. & Telecomms. Network v. FCC*, 865 F.2d 1289, 1294-95 (D.C. Cir. 1989) ("The filing of an application creates no vested right to a hearing; if the substantive standards change so that the applicant is no longer qualified, the application may be dismissed."); *Schraier v. Hickel*, 419 F.2d 663, 667 (D.C. Cir. 1969) (filing of application that has not been accepted does not create a legal interest that restricts discretion vested in agency). See also *United States v. Storer Broadcasting Co.*, 351 U.S. 192 (1952) (pending application for new station dismissed due to rule change limiting the number of licenses that could be held by one owner); *Bachow Communications, Inc. v. FCC*, 237 F.3d 683, 686-88 (D.C. Cir. 2001) (*Bachow*) (upholding freeze on new applications and dismissal of pending applications in light of adoption of new licensing scheme); *PLMRS Narrowband Corp. v. FCC*, 182 F.3d 995, 1000-01 (D.C. Cir. 1999) (applicant did not, by virtue of filing application, obtain the right to have it considered under the rules then applicable).

⁶⁷⁰ Section III.A. above. See also *Space Station Reform NPRM*, 17 FCC Rcd at 3850-52 (paras. 5-10).

⁶⁷¹ Section V.E., above.

would be granted any operating authority at all if other mutually exclusive applications were filed. In other words, no applicant had any right to rely on our former procedures for a grant, and applying new procedures does not impose any burden on any applicant.⁶⁷² Accordingly, applying our new procedures to pending satellite applications does not impair the rights any applicant had at the time it filed its application.

278. We recognize that the authorizations issued under our new procedures may not be exactly what applicants expected. This by itself does not make our decision to rely on the new procedures unreasonable, however. Courts have determined that any statute may unsettle expectations and impose burdens on past conduct. For example, a new property tax or zoning regulation may upset the reasonable expectations that prompted those affected to acquire property.⁶⁷³ Just as such new property taxes or zoning regulations are not inherently unreasonable, we conclude that reviewing satellite applications under procedures adopted after the applications were filed is not inherently unreasonable.

279. The Commission's primary goals in this proceeding include adopting licensing procedures that will allow faster service to the public, while maintaining adequate safeguards against speculation.⁶⁷⁴ Continuing to consider pending applications under the existing processing round procedure would frustrate these goals in the case of the V-band.⁶⁷⁵ Accordingly, we direct the International Bureau to treat all pending V-band applications filed in a timely manner in the current processing round as though they were filed at the same time. The V-band will be divided between GSO-like service and NGSO-like service based on the proportion of qualified GSO-like applicants and NGSO-like applicants. Qualified GSO-like applicants will be licensed to the orbit locations they requested. In cases in which two GSO-like applicants requested mutually exclusive orbit locations, the applicants will be given an opportunity to amend their applications to request another location. In cases where the applicants choose not to amend their applications, the Bureau will divide the GSO-like portion of the V-band at that location equally between the two applicants. Also, the Bureau will divide the NGSO-like portion of the V-band equally among the qualified NGSO-like applicants. The Commission is in the process of considering revisions to the V-band band plan.⁶⁷⁶ We direct the International Bureau to release a public notice shortly after the pending V-band Report and Order is released, to explain this V-band procedure in more detail, and to give V-band applicants an opportunity to amend their applications if necessary.

280. In the Notice of Proposed Rulemaking in the Ka-band licensing proceeding, we proposed a method that would enable multiple Ka-band NGSO systems to share the same spectrum.⁶⁷⁷ The pleading cycle in that proceeding has closed and we have developed a full

⁶⁷² See *Cassell v. FCC*, 154 F.3d 478, 486-87 (D.C. Cir., 1998).

⁶⁷³ *Langraf*, 511 U.S. at 269-70; *DirecTV*, 110 F.3d at 826, citing *Bell Atlantic Telephone Cos. v. FCC*, 79 F.3d 1195, 1207 (D.C. Cir., 1996); *Black Citizens for a Fair Media v. FCC*, 719 F.2d 407, 411 (D.C. Cir., 1983).

⁶⁷⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3852-56 (paras. 11-23); 3864-66 (paras. 51-53).

⁶⁷⁵ *Chadmoore*, 113 F.3d at 242; *Bachow*, 237 F.3d at 686.

⁶⁷⁶ *36-51 GHz Further Notice*, 16 FCC Rcd 12244.

⁶⁷⁷ *Ka-band NGSO NPRM*, 17 FCC Rcd at 2807 (para. 2).

record on our licensing proposal. At this stage in the proceeding, we see no reason to impose a band-splitting approach on the Ka-band NGSO applicants if they believe that they can share the spectrum. Considering the comments will allow us to determine which licensing method is best suited for the Ka-band NGSO applications, without delaying grant of the licenses. Therefore, we direct the International Bureau to award Ka-band licenses pursuant to the processing mechanism adopted in the forthcoming Report and Order in the Ka-band NGSO licensing proceeding.

281. In the case of both V-band and Ka-band NGSO applications, however, we find that eliminating the anti-trafficking rule is likely to expedite provision of service to the public, and that application of the safeguards against speculation would help limit speculation and warehousing. Accordingly, V-band and Ka-band NGSO licensees will be subject to the bond-posting requirement and new milestones adopted above.⁶⁷⁸ Finally, V-band applicants will be required to withdraw all but five GSO-like orbit location requests and one NGSO-like satellite system request. It is at best unlikely that the applicants requesting more than five GSO-like orbit locations will successfully complete construction of all the satellites they have requested. Thus, granting all those applicants' requests could result in warehousing spectrum until we cancel licenses at the time of the first milestone.

282. Finally, we will not consider fee refunds under the rule we adopt in this Order in the event that an applicant withdraws its application. The fee refund provision adopted in this Order is intended to enable an applicant in a first-come, first-served procedure to obtain a fee refund in cases where an earlier-filed application would make it impossible to grant its application.⁶⁷⁹ There are no such pending applications here that we would consider pursuant to a first-come, first-served procedure.

283. We emphasize that some of the rules we apply to pending applications do not apply to licenses *granted* before this Order was adopted. Thus, licensees will not be required to post a bond for licenses they have been granted in the past. Similarly, nothing in this Order affects the milestones of licenses granted before we adopted this Order. However, we eliminate the anti-trafficking rule for current satellite licensees as well as for satellite license applications granted after this Order takes effect.

284. In summary, we will rely on procedures adopted in this Order in reviewing currently pending satellite applications, where appropriate, as discussed above. We direct the International Bureau to review pending satellite applications consistently with our discussion in this Order, and to adopt licensing Orders acting on those pending satellite applications consistent with rules and policies governing the spectrum, and in coordination with other potentially affected Bureaus and Offices.

VIII. NON-U.S.-LICENSED SATELLITES

A. Background

⁶⁷⁸ The milestones adopted in this Order above are consistent with those proposed by the Commission in the *Ka-band NGSO NPRM*, 17 FCC Rcd at 2820 (paras. 40-41).

⁶⁷⁹ See Section VI.E.1.c. above. We note, however, that applicants who withdraw their applications will avoid the bond requirement. Moreover, there are currently provisions in the Commission's rules by which an applicant may apply for a fee refund. The new fee refund provision we adopt in this Order does not affect those provisions.

285. Under the terms of the World Trade Organization (WTO) Agreement on Basic Telecommunications Services (WTO Telecom Agreement),⁶⁸⁰ 78 WTO signatories, including the United States, have made binding commitments to open their markets to foreign competition in satellite services.⁶⁸¹ Providing opportunities for non-U.S.-licensed satellites to deliver services in the United States brings U.S. consumers the benefits of enhanced competition.⁶⁸² This policy also promotes greater opportunities for U.S. companies to enter previously closed foreign markets, thereby stimulating a more competitive global satellite services market.⁶⁸³

286. In the *Notice*, the Commission described the framework it uses for considering requests for access to the U.S. market by non-U.S.-licensed satellite operators for satellite services.⁶⁸⁴ The Commission's framework provides two procedures by which a non-U.S.-licensed satellite may provide service in the United States.⁶⁸⁵ The first procedure allows the non-U.S. satellite operator to participate in a space station processing round through an earth station application seeking to communicate with the satellite or through a "letter of intent" to use its non-U.S. satellite to provide service in the United States. The non-U.S. licensed satellite must meet

⁶⁸⁰ The WTO came into being on January 1, 1995, pursuant to the Marrakesh Agreement Establishing the World Trade Organization (the Marrakesh Agreement). 33 I.L.M. 1125 (1994). The Marrakesh Agreement includes multilateral agreements on trade in goods, services, intellectual property, and dispute settlement. The General Agreement on Trade in Services (GATS) is Annex 1B of the Marrakesh Agreement. 33 I.L.M. 1167 (1994). The WTO Telecom Agreement was incorporated into the GATS by the Fourth Protocol to the GATS (April 30, 1996), 36 I.L.M. 354 (1997) (Fourth Protocol to the GATS).

⁶⁸¹ Fourth Protocol to the GATS, 36 I.L.M. at 363. *See also DISCO II*, 12 FCC Rcd at 24102 (para. 19). The United States made market access commitments for fixed and mobile satellite services. It did not make market access commitments for Direct-to-Home (DTH) Service, Direct Broadcast Satellite Service (DBS), and Digital Audio Radio Service (DARS), and took an exemption from most-favored nation (MFN) treatment for these services as well. *See* Fourth Protocol to the GATS, 36 I.L.M. at 359. Generally, GATS requires WTO member countries to afford most-favored nation (MFN) treatment to all other WTO member nations. "With respect to any measure covered by this Agreement, each Member shall accord immediately and unconditionally to services and service suppliers of any other Member treatment no less favourable than that it accords to like services and service suppliers of any other country." GATS Article II, paragraph 1. Member nations are permitted to take "MFN exemptions," however, under certain circumstances specified in an annex to GATS. *See* GATS Annex on Article II Exemptions.

⁶⁸² *DISCO II*, 12 FCC Rcd at 24097 (para. 4).

⁶⁸³ *DISCO II*, 12 FCC Rcd at 24099 (para. 10).

⁶⁸⁴ We adopted this framework in *DISCO II*, 12 FCC Rcd 24094, *recon.* 15 FCC Rcd 7207 (1999) (*DISCO II First Reconsideration Order*), *recon. denied* 16 FCC Rcd 19794 (2001) (*DISCO II Second Reconsideration Order*). For a detailed summary of the *DISCO II* framework, we refer the reader to *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7209-10 (paras. 4-5). In evaluating requests by foreign-licensed satellites to serve the U.S. market, the Commission adopted a public interest framework that considers the effect on competition in the United States, spectrum availability, eligibility and operating (*e.g.*, technical) requirements, and national security, law enforcement, foreign policy, and trade concerns. *See, e.g.*, *Space Station Reform NPRM*, 17 FCC Rcd at 3889 n.165, *citing DISCO II First Reconsideration Order*, 15 FCC Rcd at 7209-10 (paras. 4-5).

⁶⁸⁵ *DISCO II*, 12 FCC Rcd at 24174 (para. 188).

all Commission requirements that apply to U.S.-licensed satellites before we will authorize it to provide service in the United States.⁶⁸⁶

287. The second procedure is applicable in cases where the non-U.S.-licensed satellite operator seeks immediate access to the U.S. market through an in-orbit satellite, and has initiated international coordination negotiations for that satellite network pursuant to the International Telecommunication Union's (ITU's) international Radio Regulations.⁶⁸⁷ Under this procedure, a prospective U.S. earth station operator seeking to communicate with the in-orbit non-U.S.-licensed space station must file an application for an initial earth station license or a modification of an existing license, listing the non-U.S.-licensed space station as a "point of communication," and demonstrating that the space station meets all applicable Commission requirements.⁶⁸⁸

288. Under both of these procedures, each request for initial U.S. market access must contain the information required in Section 25.114 of the Commission's rules, which governs applications for space station authorizations, with two exceptions.⁶⁸⁹ The Commission does not require the non-U.S.-licensed space station operator to submit technical information if it has completed the international coordination process, or to submit financial information if the satellite has been launched.⁶⁹⁰

289. In the *Notice*, the Commission proposed to modify the procedures and information requirements applicable to operators of non-U.S.-licensed satellites seeking access to the U.S. market, to make them consistent with any revisions to the procedures for U.S.-licensed satellites that the Commission might adopt in this proceeding.⁶⁹¹ The Commission also proposed additional rule revisions to clarify the information requirements of non-U.S.-licensed satellite operators seeking access to the U.S. market.⁶⁹² We address these issues below.

B. Revision of Framework

1. NGSO-Like Satellites

290. *Background.* In the *Notice*, the Commission stated that, in the event that it continued to use processing rounds as a vehicle for licensing, it would not need to modify the current Letter of Intent procedure.⁶⁹³ As we explained above, we have adopted a modified

⁶⁸⁶ *DISCO II*, 12 FCC Rcd at 24173-74 (paras. 184-85, 188).

⁶⁸⁷ *DISCO II*, 12 FCC Rcd at 24174 (para. 186).

⁶⁸⁸ *See generally* 47 C.F.R. § 25.137.

⁶⁸⁹ *See generally* 47 C.F.R. § 25.137; *DISCO II*, 12 FCC Rcd at 24174 (para. 188).

⁶⁹⁰ *See* 47 C.F.R. § 25.137(b); *DISCO II*, 12 FCC Rcd at 24175-76 (para. 191).

⁶⁹¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 125).

⁶⁹² *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 125).

⁶⁹³ *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 126).

processing round procedure for NGSO-like systems that awards licenses by dividing the available spectrum evenly among the qualified applicants.⁶⁹⁴

291. *Discussion.* We will continue to treat Letters of Intent filed by non-U.S.-licensed NGSO-like system operators as we have in the past. That is, a Letter of Intent will be treated as a request for reservation of spectrum in a processing round.⁶⁹⁵ If authorized to serve the United States, the foreign system will be allowed to provide service in the United States using 1/n of the available spectrum, just as U.S.-licensed satellite operators in that processing round.

2. GSO-Like Satellites

292. *Background.* The Commission also solicited comment on treating Letters of Intent and earth station applications for authority to access a non-U.S.-licensed satellite as a satellite application for purposes of determining priority in the queue, in the event that we adopt a first-come, first-served procedure.⁶⁹⁶ In other words, Letters of Intent and earth station applications would be placed in the queue together with U.S. applications, and considered at the time the Letter of Intent or earth station application reaches the head of the queue.

293. *Discussion.* Telesat maintains that foreign entities seeking to operate GSO-like satellites in the United States should not be required to file Letters of Intent. Rather, because the U.S. licensing process does not supercede the ITU date priority process, Telesat argues that the only relevant issue should be whether the non-U.S.-licensed satellite operator has ITU date priority.⁶⁹⁷ If the foreign satellite has ITU date priority, a U.S. operator seeking to operate in the same bands will not be able to coordinate with the foreign-licensed system and will therefore be unable to operate in any event. Telesat argues that we should allow non-U.S.-licensed satellite operators to provide service in the United States upon a showing of (1) a valid authorization from another administration; (2) the applicable ITU filings, and (3) a list of the relevant coordination agreements.⁶⁹⁸

294. We disagree that we should change the methods by which foreign satellite operators request U.S. access for their GSO-like satellites as Telesat suggests. Letters of Intent or earth station applications will continue to be the vehicle for non-U.S.-licensed satellite operators to request access to the United States. These vehicles provide information needed to address issues such as spectrum availability,⁶⁹⁹ and compliance with U.S. technical requirements.⁷⁰⁰ In other proceedings, we have considered and rejected arguments that obtaining a satellite license from another administration is sufficient to show that the satellite system will comply with U.S.

⁶⁹⁴ Section V. above.

⁶⁹⁵ *DISCO II Order*, 12 FCC Rcd at 24173-74 (para. 185).

⁶⁹⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 126).

⁶⁹⁷ Telesat Comments at 4; Telesat Reply at 2-3.

⁶⁹⁸ Telesat Comments at 6.

⁶⁹⁹ *DISCO II*, 12 FCC Rcd at 24158-59 (paras. 147-50).

⁷⁰⁰ *DISCO II*, 12 FCC Rcd at 24161-63 (paras. 154-59).

technical requirements.⁷⁰¹ Here, we conclude that ITU date priority is also not sufficient to show that a non-U.S.-licensed satellite operator will meet all the public interest factors we weigh when evaluating requests for access to the U.S. satellite market. Given that we will continue to consider public interest factors in reviewing requests for market access, we must determine the procedures for reviewing Letters of Intent in conjunction with the first-come, first-served procedure for GSO-like satellite applications we adopt in this Order. We conclude that Letters of Intent should be treated the same as satellite applications. This is consistent with our WTO commitments to treat non-U.S. satellite operators no less favorably than we treat U.S. satellite operators.

295. In addition, the first-come, first-served procedure we adopt today affords sufficient opportunity to address ITU priority issues.⁷⁰² Moreover, ITU date priority does not preclude us from licensing the operator of a U.S.-licensed GSO satellite on a temporary basis pending launch and operation of a satellite with higher priority in cases where the non-U.S.-licensed satellite has not been launched yet.⁷⁰³ When we have authorized a U.S. licensee to operate at an orbit location at which another Administration has ITU priority, we have issued the license subject to the outcome of the international coordination process, and emphasized that the Commission is not responsible for the success or failure of the required international coordination.⁷⁰⁴

296. Furthermore, in the first-come, first-served procedure, when considering requests for U.S. market access from two or more non-U.S.-licensed satellite operators licensed by different Administrations, we will continue to take into account the impact of the ITU coordination process. Under the ITU's international Radio Regulations, it is the responsibility of Administrations with lower ITU priority to coordinate their networks with the networks of Administrations with higher priority. In the event that a non-U.S.-licensed satellite operator is authorized to provide service in the United States, and that network is "affected," within the meaning of the ITU's international Radio Regulations, by a satellite network with lower priority seeking access to the U.S. market, we would permit the lower priority network to access the U.S. market if the higher priority satellite has not been launched. In that case, the lower priority satellite would be authorized to access the U.S. market subject to proof of coordination with the higher priority satellite. Absent such a demonstration, the lower priority satellite would be required to cease service to the U.S. market immediately upon launch and operation of the higher

⁷⁰¹ *DISCO II*, 12 FCC Rcd at 24161-63 (paras. 154-59); *DISCO II Second Reconsideration Order*, 16 FCC Rcd at 19798-99 (paras. 11-14).

⁷⁰² Section VI.D.7. above.

⁷⁰³ Section VI.C.9. above. *See also* PanAmSat Corporation, Request for Special Temporary Authority to Operate a Space Station at 60° W.L., *Order and Authorization*, 15 FCC Rcd 21802, 21804-05 (para. 11) (Int'l Bur., 1999); Application of Columbia Communications Corporation for Modification of Authorization to Permit Operation of Ku-band Satellite Capacity on the Columbia 515 Satellite Located at 37.7° West Longitude, *Memorandum Opinion and Order*, 16 FCC Rcd 12480, 12486 (para. 16) (Int'l Bur. 2001)(The Commission has often permitted satellite operators to provide service on a temporary basis from orbit locations that are not regularly assigned to them, provided the temporary operations do not adversely impact regularly licensed satellite systems).

⁷⁰⁴ *See* KaStarCom World Satellite, LLC, Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, *Order and Authorization*, 16 FCC Rcd 14322, 14330 (para. 25) (Int'l Bur. 2001) (*KaStarCom Authorization Order*).

priority satellite, or be subject to further conditions designed to address potential harmful interference to a satellite with ITU date precedence.⁷⁰⁵

297. In summary, we reject Telesat's proposal to consider requests for U.S. market access based only on a showing of ITU date precedence and foreign authorization, because that would not enable us to determine whether the satellite meets our Part 25 technical requirements. Furthermore, nothing in the procedures we adopt today precludes us from considering ITU date precedence issues when reviewing requests from non-U.S.-licensed satellite operators for U.S. market.

C. Information Requirements of Non-U.S.-Licensed Satellite Operators

1. Information Requirements for Coordinated Non-U.S. Satellites

298. *Background.* Under the *DISCO II* framework, we do not require operators of non-U.S.-licensed satellites to submit technical information concerning the satellite if they have completed international coordination.⁷⁰⁶ We did so because we assumed that, through the coordination process, we would have obtained all the information necessary to make a finding as to whether the non-U.S. satellite complies with all Commission technical requirements. In the *Notice*, we noted that it can be very time-consuming or, in some cases, impossible to derive that technical information from international coordination agreements.⁷⁰⁷ We also explained that the coordination process may not provide us with *any* technical information in those cases in which we do not need to obtain space station data from the foreign administration because the foreign satellite will not be close enough to any in-orbit or planned U.S. satellites to raise potential interference concerns.⁷⁰⁸ We observed, however, that in these cases, we still need to determine whether the foreign space station meets our technical requirements to determine whether allowing the foreign satellite to access the United States could interfere with other countries' compliant satellites that are authorized to serve the United States or with future U.S. satellites that may be authorized at orbit locations adjacent to the foreign satellite.⁷⁰⁹ We therefore proposed modifying our rules to require all non-U.S.-licensed space stations seeking initial access to the United States

⁷⁰⁵ New Skies Networks, Inc., *Order*, 18 FCC Rcd 896, 899 (para. 10) (Int'l Bur., Sat. Div., 2003).

⁷⁰⁶ 47 C.F.R. § 25.137(b); *DISCO II*, 12 FCC Rcd at 24175-76 (para. 191), *cited in Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 130). Specifically, we do not require those satellite operators to provide the information specified in Sections 25.114(c)(5) through (11) and (14). *See* 47 C.F.R. § 25.137(b).

⁷⁰⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 130). We also explained that, when a non-U.S.-licensed satellite operator has relied on a coordination agreement and we cannot determine that a non-U.S.-licensed satellite can operate interference-free in a two-degree-spacing environment, we have required U.S.-licensed earth stations operating with that satellite to do so on a non-harmful interference basis. *Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 130), *citing* Telesat Canada, Request for Declaratory Ruling or Petition for Waiver on Earth Stations' Use of ANIK E1 and ANIK E2 Satellite Capacity to Provide Basic Telecommunications Service in the United States, *Order*, 15 FCC Rcd 3649, 3654 (para. 14) (Int'l Bur., 1999) (*First ANIK E1 and E2 Permitted List Order*).

⁷⁰⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3891-92 (para. 131).

⁷⁰⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3891-92 (para. 131).

to submit all satellite-related technical information specified in Part 25, regardless of coordination status.⁷¹⁰

299. *Discussion.* Telesat and Inmarsat oppose the proposal that all non-U.S.-licensed operators submit all satellite-related technical information specified in Part 25, regardless of coordination status.⁷¹¹ Inmarsat argues that such a requirement would be unduly burdensome, and constitute an additional licensing requirement.⁷¹² Inmarsat alternatively proposes that the Commission obtain required information through the international coordination process.⁷¹³ Telesat suggests requiring non-U.S.-licensed satellite operators seeking U.S. market access to provide only the following technical information: (1) evidence of an authorization from the relevant administration; (2) the applicable coordination or notification ITU filing(s); and (3) a listing of the relevant coordination agreements.⁷¹⁴ Finally, Telesat assumes the Commission's proposal may indicate that the Commission plans to "verify" that non-U.S.-licensed satellite operators have coordinated with adjacent satellites, and opposes any such plans that the Commission may have.⁷¹⁵

300. We conclude that non-U.S.-licensed satellite operators seeking access to the U.S. market should provide the same information as U.S. satellite license applicants, regardless of whether they have completed international coordination. Based on our experience with requests for U.S. market access from non-U.S.-licensed satellite operators, we have found that it is often difficult or impossible to determine whether a non-U.S.-licensed satellite complies with our technical requirements based on international coordination agreements.⁷¹⁶ Furthermore, when a non-U.S.-satellite operator has relied on a coordination agreement and we cannot determine that a non-U.S.-licensed satellite can operate interference-free in a two-degree-spacing environment, we have required U.S.-licensed earth stations operating with that satellite to do so on a non-harmful interference basis.⁷¹⁷ In at least one of those cases, the non-U.S.-licensed satellite operator later provided adequate information to show that its satellites can operate interference-free in a two-degree-spacing environment.⁷¹⁸ Thus, both the foreign operator and Commission staff were forced to expend unnecessary time respectively preparing and processing multiple applications. By revising our rules, we should avoid this in the future.

⁷¹⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3891-92 (para. 131).

⁷¹¹ Telesat Comments 6-7; Inmarsat Comments at 13-14.

⁷¹² Inmarsat Comments at 13-14.

⁷¹³ Inmarsat Comments at 13-14.

⁷¹⁴ Telesat Comments at 6; Telesat Reply at 3.

⁷¹⁵ Telesat Comments at 7.

⁷¹⁶ *See Space Station Reform NPRM*, 17 FCC Rcd at 3891-92 (para. 131).

⁷¹⁷ *See, e.g., First ANIK E1 and E2 Permitted List Order*, 15 FCC Rcd at 3654 (para. 14).

⁷¹⁸ Telesat Canada, Request to Eliminate Conditions On ANIK E1 and E2's Inclusion on The Permitted Space Station List, *Order*, 16 FCC Rcd 15979 (Sat. and Rad. Div., Int'l Bur., 2001).

301. Neither Telesat nor Inmarsat persuade us to take a different approach. To the extent that they recommend continuing to extract the necessary technical information from coordination agreements, neither commenter addresses our experience that this procedure can delay granting U.S. market access to non-U.S.-licensed satellite operators while we attempt to cull relevant information from the agreements, or that doing so will even provide us with all the information we need to make a determination as to whether the non-U.S. satellite complies with our technical rules.⁷¹⁹ To the extent that they maintain that requiring Part 25 technical information constitutes a U.S. licensing requirement, we have previously considered and rejected these arguments.⁷²⁰

302. Finally, we have no plans or intent to use the technical information provided by non-U.S.-licensed satellite operators to verify international coordination agreements. Rather, we will use this information to determine whether the satellite complies with the technical requirements of Part 25. This is the same review we conduct when a U.S.-licensed satellite operator seeks authority to provide satellite service in the U.S. market.

2. Amendments of Letters of Intent

303. *Background.* With respect to non-U.S.-licensed satellite operators that wish to amend a proposal for a satellite system described in a Letter of Intent, the Commission proposed requiring an additional Letter of Intent describing the changes.⁷²¹ We also proposed treating such letters as we would treat amendments filed by a U.S. satellite applicant. In other words, if the planned changes constitute a "major amendment," the non-U.S. satellite operator would lose its status relative to later-filed applications.⁷²² We also invited comment on the effects, if any, of the process for filing modifications of ITU filings on our proposal for amendments of Letters of Intent.⁷²³

304. *Discussion.* Telesat supports the proposal to treat amendments to Letters of Intent in the same way as amendments filed by a U.S. applicant.⁷²⁴ We find that doing so will place non-U.S.-licensed satellite operators on an equal footing relative to U.S. satellite license applicants. We therefore adopt the proposal and will revise Section 25.137 accordingly.

305. Telesat further argues that amendments of Letters of Intent should be consistent with and contingent upon modifications of the relevant ITU filing.⁷²⁵ Telesat also maintains that some ITU filings may not affect the service the satellite operator plans to offer in the United States. We agree. Just as U.S. license applicants are required to ensure that the information in

⁷¹⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3891-92 (para. 131).

⁷²⁰ *DISCO II*, 12 FCC Rcd at 24175 (para. 190) (Part 25 information requirements do not constitute a licensing requirement).

⁷²¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 137).

⁷²² *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 137). *See also* Section VI.E.3. above (treatment of major amendments in first-come, first-served procedure).

⁷²³ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 137).

⁷²⁴ Telesat Comments at 8.

⁷²⁵ Telesat Comments at 8.

pending satellite applications is current and complete,⁷²⁶ non-U.S.-licensed satellite operators should also ensure that the information in pending Letters of Intent is current and complete. This includes ensuring that the information in the Letter of Intent is consistent with that on file with the ITU. We will revise Section 25.137 accordingly. Nothing in the record suggests that any other revisions to Section 25.137 are necessary to reflect ITU filing amendment procedures.

D. Financial Qualifications of Non-U.S.-Licensed Satellite Operators

1. Eliminating the Financial Qualification Requirement

306. *Background.* Currently, non-U.S.-licensed satellite operators who have not launched their satellites must meet our financial qualification rules when requesting access to the U.S. market.⁷²⁷ In the *Notice*, however, we proposed to eliminate the financial qualification rules for both U.S.-licensed satellites and, similarly, for non-U.S.-licensed satellites seeking to access the U.S. market.⁷²⁸

307. *Discussion.* Telesat supports the proposal to eliminate financial qualifications for non-U.S.-licensed satellites, consistent with any decision to eliminate the requirement for U.S.-licensed satellites.⁷²⁹ We have eliminated the financial requirement for U.S.-licensed space station applicants in this Order.⁷³⁰ We eliminate this requirement, as well, for non-U.S.-licensed space stations.

2. Posting of Bonds

308. In the *Notice*, the Commission proposed to modify the procedures applicable to operators of non-U.S.-licensed satellites seeking access to the U.S. market, to make them consistent with any revisions to the procedures for U.S.-licensed satellites that the Commission might adopt in this proceeding.⁷³¹ Such provisions are consistent with our WTO commitments to treat non-U.S.-licensed satellite operators no less favorably than we treat U.S. satellite operators.⁷³² The policy concern underlying our decision to require licensees to post bonds, discouraging speculative satellite applications, also applies to requests for access to the U.S. market. In other words, when a satellite operator seeks a license for speculative purposes rather than to construct a satellite system, it creates a risk that the spectrum assigned through the license

⁷²⁶ 47 C.F.R. § 1.65.

⁷²⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 129), *citing* 47 C.F.R. § 25.137(b); *DISCO II*, 12 FCC Rcd at 24175-76 (para. 191). This information requirement does not apply to non-U.S.-licensed satellite operators seeking access to the U.S. market with an in-orbit satellite.

⁷²⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 129).

⁷²⁹ Telesat Comments at 5.

⁷³⁰ Section VII.B.

⁷³¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 125).

⁷³² *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 127).

would not be put to any use until after the license were sold.⁷³³ This potential for warehousing exists regardless of whether the satellite operator has a U.S. license or a non-U.S. license.

309. Therefore, non-U.S.-licensed satellite operators filing letters of intent to request U.S.-market access with a satellite that is not in orbit and operating also be required to post a bond in the amount of \$7.5 million (U.S.) for NGSO-like satellite systems, or \$5 million for GSO-like satellites, at the time they are granted access to the U.S. market. This bond will be payable if a non-U.S.-licensed satellite operator misses a milestone, and the operator will be allowed to reduce the bond amount, as are U.S. licensees, at the time it meets each milestone. We will also consider waivers of the bond requirement to the same extent that we consider waiver requests of U.S. licensees. We will not require non-U.S.-licensed satellite operators to post bonds if they request U.S. market access with an in-orbit satellite, because such operators are generally ready to begin offering service immediately, and such a request could not be speculative in those circumstances.

E. Milestone Requirements of Non-U.S.-Licensed Satellite Operators

310. *Background.* We proposed requiring non-U.S.-licensed satellite operators to meet all milestone requirements we adopt for U.S.-licensed satellite operators in this proceeding.⁷³⁴

311. *Discussion.* Telesat agrees that milestone requirements should apply to U.S.-licensed and non-U.S.-licensed satellites alike.⁷³⁵ We will require non-U.S.-licensed satellite operators to meet the same milestone requirements we adopt in this Order for U.S. licensees.⁷³⁶ This is consistent with our current policy.⁷³⁷

312. Telesat also notes that non-U.S.-licensed satellites are bound by ITU bringing-into-use requirements.⁷³⁸ U.S. satellite operators are also bound by ITU bringing-into-use requirements, and so Telesat's observation does not warrant any revision to our procedures for requesting access to the U.S. market. In the event that a U.S. licensee's ITU bringing-into-use date occurred before its launch milestone, it would be required to launch its satellite within the ITU date, or it would lose its ITU date precedence. If the licensee loses its ITU date precedence, it would be free to submit a new ITU filing and continue construction of its satellite if it so desired. If a non-U.S.-licensed satellite operator were in this situation, its licensing Administration has discretion to decide whether to allow its licensee to submit a new ITU filing.

⁷³³ *Space Station Reform NPRM*, 17 FCC Rcd at 3884 (para. 110).

⁷³⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 129), *citing* Pacific Century Group, Inc., Letter of Intent as a Foreign Satellite Operator to Provide Fixed Satellite Services in the Ka-band in the United States, *Order*, 16 FCC Rcd 14356, 14364 (paras. 25-26) (Int'l Bur., 2001) (*PCG Ka-band Licensing Order*) (requiring non-U.S. satellite operator filing a Letter of Intent in a processing round to meet same milestones as U.S. participants in the processing round).

⁷³⁵ Telesat Comments at 5.

⁷³⁶ Section VII.C.

⁷³⁷ *PCG Ka-band Licensing Order*, 16 FCC Rcd at 14364 (paras. 25-26).

⁷³⁸ Telesat Comments at 5.

F. Safeguards Against Speculation

313. Above, we adopted limits on the number of pending applications and unbuilt satellites for U.S. satellite licensees.⁷³⁹ To make the procedures for U.S. and non-U.S. satellite operators consistent, and to discourage non-U.S. satellite operators from speculating in the U.S. market, we extend those limits to requests by non-U.S.-licensed satellite operators for U.S. market access. In other words, if a non-U.S.-licensed satellite operator files a Letter of Intent, and obtains a reservation of spectrum for a satellite to enter the U.S. market with a satellite that has not been built yet, that unbuilt satellite will be counted against that satellite operator. We will also apply the rule of attribution to non-U.S. satellite operators. If a non-U.S. satellite operator has more than a 33 percent interest in another entity with satellite applications pending before the Commission, that other entity's requests will be included in the limits.

G. Mandatory Electronic Filing for Non-U.S.-Licensed Satellite Operators

314. In the *Notice*, the Commission proposed requiring non-U.S.-licensed satellite operators seeking access to the U.S. market to submit their requests electronically, in the event that we adopt a mandatory electronic filing requirement for U.S. satellite applicants.⁷⁴⁰ Telesat supports a mandated electronic filing requirement.⁷⁴¹ We adopt our proposal, so that our treatment of non-U.S.-licensed satellite operators is consistent with our treatment of U.S.-licensed satellite operators.⁷⁴²

H. Procedures for Modifications of Permitted List Satellite Parameters

1. Background

315. One of the procedures adopted in *DISCO II* for non-U.S.-licensed satellite operators seeking access to the U.S. market was to require the satellite operator to file a new earth station application identifying the non-U.S.-licensed satellite as a point of communication, or to ask a U.S. earth station operator to modify its license to add the non-U.S.-licensed satellite as a point of communication.⁷⁴³ In the *DISCO II First Reconsideration Order*, the Commission streamlined this process in two ways. First, it allowed the *operators* of in-orbit non-U.S.-licensed satellites offering fixed-satellite service to request authority to provide space segment capacity service to U.S.-licensed earth stations in the United States. Under *DISCO II*, this request could be made only by an earth station operator. Second, it created the Permitted Space Station List (Permitted List) to facilitate access by the foreign satellite. Once a non-U.S.-licensed space station is permitted to access the U.S. market pursuant to a complete *DISCO II* analysis, it is placed on the

⁷³⁹ Section VII.E.3.

⁷⁴⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3891 (para. 128).

⁷⁴¹ Telesat Comments at 5.

⁷⁴² The Commission also invited comment on requiring non-U.S.-licensed satellite operators to submit requests for U.S. market access on Schedule S. *Space Station Reform NPRM*, 17 FCC Rcd at 3890 (para. 127). We defer this issue to a future Order. We will also consider Telesat's proposal for "validation software" in that Order. See Telesat Comments at 5.

⁷⁴³ *DISCO II*, 12 FCC Rcd at 24174 (para. 186). See also *Space Station Reform NPRM*, 17 FCC Rcd at 3892 (para. 132).

Permitted List upon the applicant's request. This list includes all satellites with which U.S. earth stations with routinely-authorized technical parameters in the conventional C- and Ku-band (known as "ALSAT" earth stations) are permitted to communicate without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth stations' original licenses.⁷⁴⁴ The Permitted List is maintained on our website, and is also available via fax or e-mail.⁷⁴⁵

316. In the *Notice*, we pointed out that we have received a number of requests from non-U.S.-licensed satellite operators to reflect changes in the operating parameters of satellites on the Permitted List.⁷⁴⁶ Some of these revisions would require a license modification if the satellite were licensed in the United States.⁷⁴⁷ We have also received a request to place a replacement satellite on the Permitted List,⁷⁴⁸ and to reflect a transfer of control of the satellite on the Permitted List.⁷⁴⁹ Accordingly, in the *Notice*, we proposed procedures to address revisions satellites on the Permitted List.⁷⁵⁰ We address each of these proposals below.

2. Permitted List Satellite Modifications

317. *Background.* We pointed out in the *Notice* that placing a satellite on the Permitted List has the legal effect of modifying all ALSAT-designated earth station licenses so that those earth stations are authorized to communicate with that satellite at that orbit location under the

⁷⁴⁴ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214-16 (paras. 16-20). "ALSAT" means "all U.S.-licensed space stations." Originally, under an ALSAT earth station license, an earth station operator providing fixed-satellite service in the conventional C- and Ku-bands could access any U.S. satellite without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth stations' licenses. See *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210-11 (para. 6). The *DISCO II First Reconsideration Order* expanded ALSAT earth station licenses to permit access to any satellite on the Permitted List. *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19).

⁷⁴⁵ *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19).

⁷⁴⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 133).

⁷⁴⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 133), citing Telesat Canada, Petition for Declaratory Ruling For Inclusion of ANIK F1 on the Permitted Space Station List, *Order*, 15 FCC Rcd 24828 (Int'l. Bur., 2000) (*ANIK F1 Permitted List Order*).

⁷⁴⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 133), citing European Telecommunication Satellite Organization (EUTELSAT); Petitions for Declaratory Ruling To Add EUTELSAT Satellites ATLANTIC BIRD™ 1 at 12.5° W.L and ATLANTIC BIRD™ 2 at 8° W.L to the Commission's Permitted Space Station List, *Order*, 16 FCC Rcd 15961 (Int'l Bur., Sat. and Rad. Div., 2001).

⁷⁴⁹ On March 1, 2001, Empresa Brasileira de Telecomunicações S.A. filed a letter with the Commission indicating that 19.9 percent of its company had been purchased by Societe Europeenne des Satellites S.A., and the company was renamed "STAR ONE S.A." See *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 133), citing Satellite Policy Branch Information, *Public Notice*, Report No. SAT-00076 (released July 20, 2001).

⁷⁵⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 133).

terms and conditions on the Permitted List and in the earth station licenses.⁷⁵¹ We explained further that, if a Permitted List satellite operator relocates its satellite to a new orbital location, it must request a revision of its Permitted List entry to enable ALSAT earth stations to continue communicating with that satellite after the relocation.⁷⁵² Furthermore, we must be able to determine that operation of the satellite at the new location would not cause harmful interference to other satellite systems after the relocation.⁷⁵³

318. Therefore, we invited comment on a procedure for cases in which a non-U.S.-licensed satellite operator plans to modify its operations in a way that would require prior Commission authorization in the case of a U.S.-licensed satellite operator.⁷⁵⁴ Specifically, we proposed requiring the non-U.S.-licensed satellite operator to file a petition for declaratory ruling that would supply the information required of U.S. satellite operators seeking license modifications.⁷⁵⁵ In other words, the non-U.S.-licensed satellite operator would be required to provide the same information as required in a new space station application, but only those items of information that change need to be submitted, provided the applicant certifies that the remaining information has not changed.⁷⁵⁶

319. *Discussion.* Telesat opposes requiring that non-U.S.-licensed satellite operators modifying their operations file the relevant changes in technical information.⁷⁵⁷ Rather, Telesat proposes that the Commission simply require the applicant to amend the authorization with an attestation that the modification has been carried out in accordance with the appropriate coordination process with the adjacent operators.⁷⁵⁸

320. We conclude that we must consider the revised technical parameters in order to determine whether the changes to the non-U.S.-licensed satellite will affect the operations of other satellites authorized to serve the United States. We require U.S.-licensed operators to provide this information for this reason. Moreover, merely requiring non-U.S.-licensed space station operators to attest that they have completed coordination may not be sufficient in all cases to determine whether the satellite as modified will comply with the technical requirements of Part 25. Accordingly, we will revise Section 25.137 to require non-U.S.-licensed satellite operators modifying their operations to provide the same information as required in a new space station

⁷⁵¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 137).

⁷⁵² *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 134).

⁷⁵³ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 134).

⁷⁵⁴ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 134).

⁷⁵⁵ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 134).

⁷⁵⁶ *Space Station Reform NPRM*, 17 FCC Rcd at 3893 (para. 134), *citing* 47 C.F.R. § 25.117(d).

⁷⁵⁷ Telesat Comments at 7.

⁷⁵⁸ Telesat Comments at 7.

application, but only those items of information that change need to be submitted, provided the applicant certifies that the remaining information has not changed.⁷⁵⁹

3. Replacements of Permitted List Satellites

321. *Background.* In the *Notice*, we proposed a procedure for replacements of non-U.S.-licensed satellites on the Permitted List that is similar to our proposal for U.S. replacement satellite applications.⁷⁶⁰ Specifically, if the non-U.S.-licensed satellite operator's orbit location remains available for a satellite licensed by the same Administration that licensed the currently operating satellite, and the proposed replacement satellite will have the same technical characteristics as the currently operating satellite, we would allow this satellite to access the United States.⁷⁶¹ If the petition for declaratory ruling seeking to put the replacement satellite on the Permitted List is unopposed, we proposed applying the same procedure we adopt for U.S. replacement satellites.⁷⁶²

322. *Discussion.* Telesat supports streamlining the procedures for non-U.S.-licensed replacement satellites, and it specifically supports the "grant-stamp" approach.⁷⁶³ Telesat encourages the Commission to apply the grant-stamp approach regardless of whether the technical characteristics of the replacement satellite are the same as those of the currently-operating satellite.⁷⁶⁴ Also, Telesat argues that the Commission need not wait until the satellite is in orbit to place the replacement satellite on the Permitted list.⁷⁶⁵

323. We adopt our proposed procedure for considering placement of non-U.S.-licensed replacement satellites on the Permitted List. This is substantially similar to the procedure for replacements of U.S.-licensed satellites we adopt in this Order.⁷⁶⁶ We will revise Section 25.137 accordingly.

324. We afford non-U.S.-licensed satellites the same replacement expectancy as we do U.S.-licensed satellites. That is, we will permit the proposed replacement satellite to access the U.S. market provided that the location remains available to a satellite authorized by the Administration that authorized the existing satellite, and the technical characteristics of the proposed replacement allow it to be assigned to the location. We note that operators of non-U.S.-

⁷⁵⁹ In a future Order, we will consider proposals for a streamlined procedure for some space station modification requests. In the event we adopt any of those proposals, we will also determine at that time how best to extend that procedure to non-U.S.-licensed satellite operators.

⁷⁶⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3893-94 (para. 135).

⁷⁶¹ *Space Station Reform NPRM*, 17 FCC Rcd at 3893-94 (para. 135).

⁷⁶² *Space Station Reform NPRM*, 17 FCC Rcd at 3893-94 (para. 135).

⁷⁶³ Telesat Comments at 7-8.

⁷⁶⁴ Telesat Comments at 7-8.

⁷⁶⁵ Telesat Comments at 7-8.

⁷⁶⁶ Section VII.G.

licensed satellites that do not meet these criteria may still request access to the U.S. market through the standard *DISCO II* framework.

325. Finally, contrary to Telesat's assertion otherwise, we do not require satellites to be in orbit before placing them on the Permitted List. We require that all non-U.S.-licensed satellites, including replacements, be licensed by the host Administration before they are placed on the Permitted List, but we do not require that the satellite be in orbit.

4. Changes of Ownership of Satellites on the Permitted List

326. *Background.* The Commission proposed a very simple procedure for considering changes in ownership of non-U.S.-licensed satellites on the Permitted List.⁷⁶⁷ We proposed issuing a public notice announcing that the transaction has taken place, and inviting comment on whether the transaction affects any of the considerations made when the original satellite operator was allowed to enter the U.S. market.⁷⁶⁸ We would review any comments filed, and determine whether any commenter raised any concern that would warrant precluding the new operator from entering the U.S. market, including concerns relating to national security, law enforcement, foreign policy, or trade issues.⁷⁶⁹ In addition, if control of the satellite were transferred to a non-WTO-country-based operator, we invited comment on whether we should require the purchaser to meet the ECO-Sat test.⁷⁷⁰

327. *Discussion.* Telesat supports our proposed procedure for changes in ownership of non-U.S.-licensed satellites on the Permitted List.⁷⁷¹ We adopt our proposed procedure for considering transfers of control of non-U.S.-licensed satellites on the Permitted List, which provides a reasonable framework for considering any issues that might be raised by such a transfer. Furthermore, none of the commenters in this proceeding have recommended any other procedure. We will revise Section 25.137 accordingly. Permitted List satellites that have been transferred to new owners may continue to provide service in the United States unless and until the Commission determines otherwise.

5. Procedures for Non-U.S.-Licensed Satellites That Are Not on the Permitted List

328. *Background.* We observed in the *Notice* that non-U.S.-licensed satellite operators do not need to place their satellites on the Permitted List to gain access to the U.S. market. They can also gain access by being added as a point of communication to one or more U.S. earth

⁷⁶⁷ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 136). The considerations we weigh when reviewing requests for U.S. market access include the effect on competition in the United States, spectrum availability, eligibility and operating (e.g., technical) requirements, and national security, law enforcement, foreign policy, and trade concerns. *DISCO II*, 12 FCC Rcd at 24107-24172 (paras. 30-182).

⁷⁶⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 136).

⁷⁶⁹ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 136), citing *DISCO II*, 12 FCC Rcd at 24170-72 (paras. 178-82).

⁷⁷⁰ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 136).

⁷⁷¹ Telesat Comments at 8.

station licenses.⁷⁷² This procedure is available for all non-U.S.-licensed satellites, not just conventional C-band and Ku-band satellites. We did not propose any new procedures for modifying such satellites. Instead, we proposed continuing to rely on our existing procedures for earth station modification procedures.⁷⁷³

329. *Discussion.* No one commented on this issue. We conclude that our existing procedure for earth station license modification provides a sufficient means for reflecting modifications of non-U.S.-licensed space station operations. In addition, the earth station license modification procedure is very important in cases in which the non-U.S.-licensed satellite operator plans to operate in the extended C-band or extended Ku-band, because those operations often require coordination with terrestrial service providers and other service providers. Accordingly, as we proposed in the *Notice*, we will not adopt any revisions to that procedure at this time.

IX. CONCLUSION

330. In this Order, we adopt substantial improvements to our satellite licensing procedures. For NGSO-like satellite system applications, we will continue to use processing rounds, and divide the available spectrum evenly among the qualified applicants in the processing round. For GSO-like satellite applications, we replace processing rounds with a first-come, first-served procedure. In both procedures, we adopt safeguards to limit speculative or frivolous applications. To help implement these procedures, we eliminate the anti-trafficking rule for satellites. In addition, eliminating the anti-trafficking rules yields other significant public interest benefits, such as expediting the transfer of licenses to entities that are more likely to provide service to the public in a timely manner. We also strengthen our milestone requirements, to expedite reassignment of satellite licenses in cases where a licensee is unable or unwilling to construct its satellite system. We also streamline the satellite licensing process, by replacing the requirement to provide financial information with a bond requirement, and by creating a new procedure for replacement satellite applications. Finally, we revise the framework for considering requests from non-U.S.-licensed satellite operators for access to the U.S. market.

331. All the procedural revisions we adopt today will greatly benefit both satellite service customers and satellite operators, because the new procedures will enable the Commission to issue satellite licenses significantly more quickly than was possible in the past. Expediting licensing procedures will lead to greater choice among satellite service providers. It will also allow satellite operators to begin operating much sooner than is often possible under our current satellite licensing procedures. Moreover, allowing negotiations to take place after licenses are issued should allow market forces to drive the business discussions with a minimum of Commission involvement.

332. In addition, strengthening milestone requirements will reduce the time scarce orbit and spectrum resources lie fallow. Thus, our procedures will allow more efficient use of that resource. More importantly, orbit and spectrum assignments will be based more on market forces and less on the Commission's administrative procedures, which in turn will result in more efficient orbit and spectrum assignments.

X. FURTHER NOTICE OF PROPOSED RULEMAKING: BOND ISSUES

⁷⁷² *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 138).

⁷⁷³ *Space Station Reform NPRM*, 17 FCC Rcd at 3894 (para. 138).

333. In the *First Report and Order* in this proceeding, the Commission required satellite licensees to post a bond, payable upon failure to meet a milestone, and without facing circumstances outside the licensee's control that warrant extension of the milestone.⁷⁷⁴ We base this requirement on Intelsat's proposed bond requirement.⁷⁷⁵ The purpose of this bond requirement is to create a disincentive for parties to apply for satellite licenses for speculative reasons. On an interim basis, we adopted a bond amount of \$5 million for GSO-like licenses, and \$7.5 million for NGSO-like licenses.

334. Here, we seek comment on some of the details of the bond requirement. First, we invite comment on the appropriate bond amount. This amount should be high enough to deter speculative applications, without discouraging new or innovative satellite applications. It is unlikely that we would find that bonds less than the interim amounts we adopted in the First Report and Order above would be sufficient to deter speculation, unless a commenter provides a convincing showing to the contrary. Intelsat proposed \$10 million for all satellite applications. Commenters advocating a different amount should recommend a specific dollar amount, and explain in detail why they believe that the amount they recommend will deter speculation without discouraging new or innovative satellite applications. In particular, parties contending that a \$10 million bond requirement would discourage new or innovative satellite applications should explain why, in detail.

335. Second, we invite comment on whether we should allow licensees to establish an escrow account, as an alternative to posting a bond. In the *Private Paging Exclusivity Order*, on which we in part base the bond requirement, the Commission gave licensees the option of posting a performance bond or establishing an escrow account.⁷⁷⁶ We seek comment on whether to give satellite licensees this option as well. If we were to adopt an escrow account option, licensees selecting that option would be required to establish an escrow account equal to the final bond amount adopted by the Commission. Licensees would be required to turn over the escrow account to the U.S. Treasury upon missing a milestone without an adequate basis for extending the milestone. They would also be permitted to withdraw interest from the account at any time, and withdraw principle upon meeting each milestone, just as licensees posting bonds may reduce the amount of the bond. Parties supporting this option must explain how an escrow account will discourage speculative satellite applications.

336. Finally, we invite comment on revising the bond requirements applicable to non-U.S.-licensed satellite operators seeking access to the U.S. market, to be consistent with any other revisions to the bond requirement the Commission adopts in this proceeding.

XI. PROCEDURAL MATTERS

337. *Final Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act (RFA),⁷⁷⁷ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the

⁷⁷⁴ Section VII.C.10.

⁷⁷⁵ Intelsat Comments at 10-12.

⁷⁷⁶ *Private Paging Exclusivity Order*, 8 FCC Rcd at 8326.

⁷⁷⁷ See 5 U.S.C. §603.

*Notice.*⁷⁷⁸ The Commission sought written public comments on the possible significant economic impact of the proposed policies and rules on small entities in the *Notice*, including comments on the IRFA. No one commented specifically on the IRFA. Pursuant to the RFA,⁷⁷⁹ a Final Regulatory Flexibility Analysis is contained in Appendix D.

338. *Initial Regulatory Flexibility Analysis.* Appendix E to this document contains the analysis required for the proposals in this *Notice of Proposed Rulemaking* by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 603.

339. *Paperwork Reduction Act Analysis.* Except for the information collections associated with the contract execution and CDR milestones, and the bond requirement, the actions contained herein has been analyzed with respect to the Paperwork Reduction Act of 1995 and found to impose new or modified reporting and recordkeeping requirements or burdens on the public. Approval of the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act has been obtained for many of those requirements. (OMB Control Nos. 3060-0678, 3060-1007 and 3060-1013).

340. This Order contains new and modified information collections subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection(s) contained in this proceeding. Implementation of these new or modified reporting and/or recordkeeping requirements will be subject to approval by the OMB, as prescribed by the Act, and will go into effect upon announcement in the Federal Register of OMB approval.

341. *Ex Parte Presentations.* This is a permit-but-disclose rulemaking proceeding. *Ex parte* presentations are permitted, provided they are disclosed as provided in Sections 1.1202, 1.1203, and 1.1206(a) of the Commission's Rules, 47 C.F.R. Sections 1.1202, 1.1203, and 1.1206(a).

342. *Comment.* Pursuant to Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. Sections 1.415 and 1.419, interested parties may file comments on or before 30 days following publication in the Federal Register, and reply comments on or before 60 days following publication in the Federal Register. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24,121 (1998).

343. Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To obtain filing instructions for e-mail comments, commenters should send an e-mail to

⁷⁷⁸ *Space Station Reform NPRM*, 17 FCC Rcd at 3915-17 (App. D).

⁷⁷⁹ *See* 5 U.S.C. §604.

ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address.>" A sample form and directions will be sent in reply.

344. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, The Portals, 445 Twelfth Street, S.W., Room TW-A325, Washington, D.C. 20554.

345. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to: Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, The Portals, 445 Twelfth Street, S.W., Room TW-A325, Washington, D.C. 20554. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible format using Word for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, the docket number of this proceeding, type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleading, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554.

346. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0531 (voice), 202-418-7365 (tty).

347. *Additional Information.* For general information concerning this rulemaking proceeding, contact Steven Spaeth, International Bureau, at (202) 418-1539, International Bureau; Federal Communications Commission, Washington, D.C. 20554.

XII. ORDERING CLAUSES

348. Accordingly, IT IS ORDERED, pursuant to Sections 1, 2, 4(i), 4(j), 7(a), 11, 301, 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(j), 157(a), 161, 301, 303(c), 303(f), 303(g), 303(r), that this First Report and Order in IB Docket Nos. 02-34 and 02-54 is hereby ADOPTED.

349. IT IS FURTHER ORDERED that Part 1 and Part 25 of the Commission's rules ARE AMENDED as set forth in Appendix B.

350. IT IS FURTHER ORDERED that the provisions of this First Report and Order in IB Docket Nos. 02-34 and 02-54, other than the adoption of Sections 25.137(d)(4), 25.149, 25.164(c), 25.164(d), and 25.164(e), will be effective upon publication of a summary of this First Report and Order in IB Docket Nos. 02-34 and 02-54 in the Federal Register.

351. IT IS FURTHER ORDERED that Sections 25.137(d)(4), 25.149, 25.164(c), 25.164(d), and 25.164(e), as adopted in this First Report and Order and set forth in Appendix B, will be effective 60 days after publication of a summary of this First Report and Order in IB

Docket Nos. 02-34 and 02-54 in the Federal Register, pending approval by the Office of Management and Budget.

352. IT IS FURTHER ORDERED that, effective upon the adoption date of this First Report and Order in IB Docket Nos. 02-34 and 02-54, no applications for space station licenses for any satellite service addressed in this First Report and Order will be accepted for filing. This freeze will continue until the rule revisions adopted in this First Report and Order in IB Docket Nos. 02-34 and 02-54, other than the adoption of Sections 25.137(d)(4), 25.149, 25.164(c), 25.164(d), and 25.164(e), take effect.

353. IT IS FURTHER ORDERED that the license term of each space station license issued on or before April 17, 2002, and in effect on the release date of this Order, IS HEREBY EXTENDED to 15 years, starting on the date the licensee certified to the Commission that the space station was successfully placed in orbit and its operations fully conform to the terms and conditions of its authorization.

354. IT IS FURTHER ORDERED that the Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this First Report and Order in IB Docket Nos. 02-34 and 02-54, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

355. Accordingly, IT IS ORDERED, pursuant to Sections 4(i), 7(a), 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 157(a), 303(c), 303(f), 303(g), 303(r), that this Further Notice of Proposed Rulemaking in IB Docket No. 02-34 is hereby ADOPTED.

356. IT IS FURTHER ORDERED that the Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this Further Notice of Proposed Rulemaking in IB Docket No. 02-34, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

I. IB Docket No. 02-34A. Comments, filed June 3, 2002

1. Boeing Company (Boeing)
2. Cellular Telecommunications & Internet Association (CTIA)
3. Final Analysis Communication Services, Inc. (Final Analysis)
4. Hughes Network Systems, Inc., Hughes Communications, Inc., and Hughes Communications Galaxy, Inc. (Hughes)
5. Inmarsat Ventures PLC (Inmarsat)
6. Intelsat LLC (Intelsat)
7. PanAmSat Corporation (PanAmSat)
8. Pegasus Development Corporation (Pegasus)
9. Satellite Industry Association (SIA)
10. SES Americom, Inc. (SES Americom)
11. Telesat Canada (Telesat)
12. Teledesic LLC (Teledesic)

B. Replies, filed July 2, 2002

1. ICO Global Communications (Holdings) Ltd. (ICO)
2. Intelsat
3. ORBCOMM LLC (Orbcomm)
4. PanAmSat
5. SES Americom
6. Teledesic
7. Telesat

II. IB Docket No. 02-54A. Comments

AON Space, Inc.
Arianespace Inc.
Dr. Constantine Cassapakis
Jan King
National Remote Sensing and Space Law Center
Nickolaus E. Leggett
Orbcomm LLC
PanAmSat Corp.
Radio Amateur Satellite Corp.
Satellite Industry Association ("SIA")
Telesat Canada
Victor J. Slabinski

B. Reply Comments

Radio Amateur Satellite Corp.
SES Americom, Inc.
Telesat Canada
Victor J. Slabinski

C. Late-Filed Comments

Massachusetts Institute of Technology Lincoln Laboratory

APPENDIX BRule Changes

For the reasons discussed above, the Federal Communications Commission amends title 47 of the Code of Federal Regulations, part 25, as follows:

PART 1 -- PRACTICE AND PROCEDURE

1. The authority citation for Part 1 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309 and 325(e).

2. Amend §1.1113 by adding paragraph (d) to read as follows:

§1.1113 Return or refund of charges.

* * * * *

(d) Applicants for space station licenses under the first-come, first served procedure set forth in part 25 of this title will be entitled to a refund of the fee if, before the Commission has placed the application on public notice, the applicant notifies the Commission that it no longer wishes to keep its application on file behind the licensee and any other applicants who filed their applications before its application, and specifically requests a refund of the fee and dismissal of its application.

PART 25 -- SATELLITE COMMUNICATIONS

3. The authority citation for Part 25 continues to read as follows:

Authority: 47 U.S.C. 701-744. Interprets or applies Sections 4, 301, 302, 303, 307, 309, and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309, 332, unless otherwise noted.

4. Amend § 25.112 by adding paragraph (a)(3) and revising the introductory language in paragraph (b) to read as follows:

§ 25.112 Defective applications.

(a) * * *

(3) The application requests authority to operate a space station in a frequency band that is not allocated internationally for such operations under the Radio Regulations of the International Telecommunication Union.

(b) Applications for space station authority found defective under paragraph (a)(3) of this section will not be considered. Applications for authority found defective under paragraphs (a)(1) or (a)(2) of this section may be accepted for filing if:

* * * * *

5. Amend § 25.113 by revising paragraph (g) to read as follows:

§ 25.113 Construction permits, station licenses and launch authority.

* * * * *

(g) A launch authorization and station license (i.e., operating authority) must be applied for and granted before a space station may be launched and operated in orbit. Request for launch authorization may be included in an application for space station license. However, an application for authority to launch and operate an on-ground spare satellite will be considered pursuant to the following procedures:

(1) Applications for launch and operation of an on-ground spare NGSO-like satellite will be considered pursuant to the procedures set forth in Section 25.157 of this Chapter, except as set forth in paragraph (g)(3) of this section.

(2) Applications for launch and operation of an on-ground spare GSO-like satellite will be considered pursuant to the procedures set forth in Section 25.158 of this Chapter, except as set forth in paragraph (g)(3) of this section.

(3) Neither paragraph (g)(1) nor (g)(2) will apply in cases where the space station to be launched is determined to be an emergency replacement for a previously authorized space station that has been lost as a result of a launch failure or a catastrophic in-orbit failure.

6. Amend § 25.114 by revising paragraphs (b) and removing and reserving paragraph (c)(13), to read as follows:

§ 25.114 Applications for space station authorizations.

* * * * *

(b) Each application for a new or modified space station authorization must constitute a concrete proposal for Commission evaluation, although the applicant may propose alternatives that increase flexibility in accommodating the satellite in orbit. Each application must also contain the formal waiver required by Section 304 of the Communications Act, 47 U.S.C. 304. The technical information for a proposed satellite system need not be filed on any prescribed form but should be complete in all pertinent details. Applications for new space station authorizations other than authorizations for the Direct Broadcast Service (DBS) and Digital Audio Radio Satellite (DARS) service must be filed electronically through the International Bureau Filing System (IBFS).

(c) * * *

(13) [reserved].

* * * * *

7. Amend § 25.116 by removing and reserving paragraph (b)(3); adding paragraph (b)(5); revising the introductory language in paragraph (c), redesignating paragraph (d) as (e), and adding new paragraph (d) to read as follows:

§ 25.116 Amendments to applications.

(b) * * *

(3) [reserved].

(5) Amendments to "defective" space station applications, within the meaning of section 25.112 of this Chapter will not be considered.

* * * * *

(c) Any application for an NGSO-like satellite license within the meaning of Section 25.157 of this chapter will be considered to be a newly filed application if it is amended by a major amendment (as defined by paragraph (b) of this section) after a "cut-off" date applicable to the application, except under the following circumstances:

* * * * *

(d) Any application for a GSO-like satellite license within the meaning of Section 25.158 of this chapter will be considered to be a newly filed application if it is amended by a major amendment (as defined by paragraph (b) of this section), and will cause the application to lose its status relative to later-filed applications in the "queue" as described in Section 25.158 of this Chapter.

* * * * *

8. Amend § 25.117 by redesignating paragraph (d) as (d)(1), and adding paragraph (d)(2) to read as follows:

§ 25.117 Modification of station license.

* * * * *

(d) * * *

(2) Applications for modifications of space station authorizations will be granted except under the following circumstances:

(i) Granting the modification would make the applicant unqualified to operate a space station under the Commission's rules.

(ii) Granting the modification request would not serve the public interest, convenience, and necessity.

(iii) Except as set forth in paragraph (d)(2)(iv) of this section, applications for modifications of GSO-like space station authorizations granted pursuant to the procedure set forth in Section 25.158 of this Chapter, which seek to relocate a GSO satellite or add a frequency band to the authorization, will be placed in a queue pursuant to Section 25.158 of this Chapter and considered only after previously filed space station license applications or space station modification applications have been considered.

(iv) Applications for modifications of space station authorizations to increase the authorized bandwidth will not be considered in cases in which the original space station authorization was granted pursuant to the procedures set forth in Section 25.157(e) or 25.158(c)(4) of this Chapter.

* * * * *

9. Amend § 25.119 by adding paragraph (g) to read as follows:

§ 25.119 Assignment or transfer of control of station authorization.

* * * * *

(g) The Commission retains discretion in reviewing assignments and transfers of control of space station licenses to determine whether the initial license was obtained in good faith with the intent to construct a satellite system.

10. Amend § 25.120 by revising paragraph (b) to read as follows:

§ 25.120 Application for special temporary authorization.

* * * * *

(b)(1) The Commission may grant a temporary authorization only upon a finding that there are extraordinary circumstances requiring temporary operations in the public interest and that delay in the institution of these temporary operations would seriously prejudice the public interest. Convenience to the applicant, such as marketing considerations or meeting scheduled customer in-service dates, will not be deemed sufficient for this purpose.

(2) The Commission may grant a temporary authorization for a period not to exceed 180 days, with additional periods not exceeding 180 days, if the Commission has placed the special temporary authority (STA) request on public notice.

(3) The Commission may grant a temporary authorization for a period not to exceed 60 days, if the STA request has not been placed on public notice, and the applicant plans to file a request for regular authority for the service.

(4) The Commission may grant a temporary authorization for a period not to exceed 30 days, if the STA request has not been placed on public notice, and an application for regular authority is not contemplated.

* * * * *

11. Amend § 25.121 by revising paragraph (e) to read as follows:

§ 25.121 License term and renewals.

* * * * *

(e) Renewal of licenses. Applications for renewals of earth station licenses must be submitted on FCC Form 405 (Application for Renewal of Radio Station License in Specified Services) no earlier than 90 days, and no later than 30 days, before the expiration date of the license. Applications for space station system replacement authorization for non-geostationary orbit satellites shall be filed no earlier than 90 days, and no later than 30 days, prior to the end of the twelfth year of the existing license term.

12. Amend § 25.137 by revising paragraphs (b), (c), and (d), and adding paragraphs (e), (f), and (g), to read as follows:

§ 25.137 Application requirements for earth stations operating with non-U.S. licensed space stations.

* * * * *

(b) Earth station applicants, or entities filing a "letter of intent," or "Petition for Declaratory Ruling," requesting authority to operate with a non-U.S. licensed space station must attach to their FCC Form 312 an exhibit providing legal and technical information for the non-U.S. licensed space station in accordance with part 25 of this Chapter. Applications addressed in this paragraph must be filed electronically through the International Bureau Filing System (IBFS).

(c) A non-U.S. licensed NGSO-like satellite system seeking to serve the United States can be considered contemporaneously with other U.S. NGSO-like satellite system pursuant to Section 25.157 of this Chapter and considered before later-filed applications of other U.S. satellite system operators, and a non-U.S.-licensed GSO-like satellite system seeking to serve the United States can have its request placed in a queue pursuant to Section 25.158 of this Chapter and considered before later-filed applications of other U.S. satellite system operators, if the non-U.S. licensed satellite system is:

- (1) In orbit and operating;
- (2) Has a license from another administration; or
- (3) Has been submitted for coordination to the International Telecommunication Union.

(d) Earth station applicants requesting authority to operate with a non-U.S. licensed space station must demonstrate that the space station the applicant seeks to access has complied with all applicable Commission requirements for non-U.S. licensed systems to operate in the United States, including but not limited to the following:

- (1) Milestones,
- (2) Reporting requirements,
- (3) Any other applicable service rules;
- (4) Posting a bond of \$7.5 million for NGSO-like satellite systems, or \$5 million for GSO-like satellites, denominated in U.S. dollars, compliant with the terms of Section 25.149 of this Chapter;
- (5) Non-U.S. licensed GSO-like space station operators with a total of five requests for access to the U.S. market in a particular frequency band, or a total of five previously granted requests for access to the U.S. market with unbuilt GSO-like space stations in a particular frequency band, or a combination of pending GSO-like requests and granted requests for unbuilt GSO-like space stations in a particular frequency band that equals five, will not be permitted to request access to the U.S. market with another GSO-like space station license in that frequency band. In addition, non-U.S.-licensed NGSO-like satellite system operators with one request on file with the Commission in a particular frequency band, or one granted request for an unbuilt NGSO-like satellite system in a particular frequency band, will not be permitted to request access to the U.S. market with another NGSO-like satellite system in that frequency band.

(e) A non-U.S.-licensed satellite operator that is seeking to serve the United States pursuant to a Letter of Intent may amend its request by submitting an additional Letter of Intent. Such additional Letters of Intent will be treated as amendments filed by U.S. space station applicants for purposes of determining the order in which the Letters of Intent will be considered relative to other pending applications.

(f) A non-U.S.-licensed satellite operator that has been permitted to serve the United States pursuant to a Letter of Intent or Petition for Declaratory Ruling, may modify its U.S. operations under the procedures set forth in Section 25.117(d) of this Chapter.

(g) A non-U.S.-licensed satellite operator that has been permitted to serve the United States pursuant to a Petition for Declaratory Ruling must notify the Commission if it plans to transfer control or assign its license to another party, so that the Commission can afford interested parties an opportunity to comment on whether the proposed transaction affects any of the considerations we made when we allowed the satellite operator to enter the U.S. market. If the transferee or assignee is not licensed by or seeking a license from a country that is a member of the World Trade Organization for services covered under the World Trade Organization Basic Telecommunications Agreement, the non-U.S.-licensed satellite operator will be required to make the showing described in paragraph (a) of this Section.

13. Amend § 25.140 by revising paragraph (b) and removing and reserving paragraphs (c) and (d) to read as follows:

§ 25.140 Qualifications of fixed-satellite space station licensees.

* * * * *

(b) Each applicant for a space station authorization in the fixed-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is legally, technically, and otherwise qualified to proceed expeditiously with the construction, launch and/or operation of each proposed space station facility immediately upon grant of the requested authorization. Each applicant must provide the following information:

- (1) The information specified in § 25.114; and
- (2) An interference analysis to demonstrate the compatibility of its proposed system 2 degrees from any authorized space station. An applicant should provide details of its proposed r.f. carriers which it believes should be taken into account in this analysis. At a minimum, the applicant must include, for each type of r.f. carrier, the link noise budget, modulation parameters, and overall link performance analysis. (See, e.g., appendices B and C to Licensing of Space Stations in the Domestic Fixed-Satellite Service (available at address in §0.445 of this chapter)).

(c) [reserved].

(d) [reserved].

* * * * *

§ 25.141 [Amended].

14. Amend § 25.141 by removing and reserving paragraph (b).

15. Amend § 25.142 by revising paragraph (a)(1), and by removing and reserving paragraph (a)(4) to read as follows:

§ 25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.

(a) Space station application requirements. (1) Each application for a space station system authorization in the non-voice, non-geostationary mobile-satellite service shall describe in detail the proposed non-voice, non-geostationary mobile-satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical and legal qualifications of the

applicant. In particular, each application shall include the information specified in § 25.114. Applicants must also file information demonstrating compliance with all requirements of this section, and showing, based on existing system information publicly available at the Commission at the time of filing, that they will not cause unacceptable interference to any non-voice, non-geostationary mobile-satellite service system authorized to construct or operate.

* * *

(a)(4) [reserved.]

* * * * *

§ 25.143 [Amended].

16. Amend § 25.143 by removing and reserving paragraphs (b)(3) and (g).

17. Amend § 25.144 by revising paragraph (b) to read as follows:

§ 25.144 Licensing provisions for the 2.3 GHz satellite digital audio radio service.

* * * * *

(b) Milestone Requirements. Each applicant for system authorization in the satellite digital audio radio service must demonstrate within 10 days after a required implementation milestone as specified in the system authorization, and on the basis of the documentation contained in its application, certify to the Commission by affidavit that the milestone has been met or notify the Commission by letter that it has not been met. At its discretion, the Commission may require the submission of additional information (supported by affidavit of a person or persons with knowledge thereof) to demonstrate that the milestone has been met. The satellite DARS milestones are as follows, based on the date of authorization:

* * * * *

§ 25.145 [Amended].

18. Amend § 25.145 by removing and reserving paragraph (d).

§ 25.146 [Amended].

19. Amend § 25.146 by removing and reserving paragraph (i).

20. Amend part 25 by adding § 25.149 to read as follows:

§ 25.149 Posting of Bonds.

(a) For all satellite licenses other than DBS and DARS licenses issued after **[Insert effective date of rule]**, the licensee is required to post a bond within 30 days of the grant of its license. Failure to post the required bond will render the license null and void automatically.

(1) NGSO-like licensees are required to post a bond in the amount of \$7.5 million.

(2) GSO-like licensees are required to post a bond in the amount of \$5 million.

(b) The licensee must use a surety company deemed acceptable within the meaning of 31 U.S.C. § 9304 *et seq.* (See, e.g., Department of Treasury Fiscal Service, Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and As Acceptable Reinsurance Companies, 57 Fed. Reg. 29356 (1992).) The bond must name the U.S. Treasury as beneficiary in the event of the licensee's default. The licensee must provide the Commission with a copy of the performance bond, including all details and conditions.

(c) A licensee will be considered to be in default if it fails to meet any milestone deadline set forth in section 25.164 of this Chapter, and, at the time of milestone deadline, the licensee has not provided a sufficient basis for extending the milestone.

(d) An NGSO-like licensee will be permitted to reduce the amount of the bond by 20 percent of the original bond amount upon successfully meeting a milestone deadline set forth in section 25.164(b) of this Chapter. A GSO-like licensee will be permitted to reduce the amount of the bond by 25 percent of the original bond amount upon successfully meeting a milestone deadline set forth in section 25.164(a) of this Chapter.

21. Revise § 25.155 to read as follows:

§ 25.155 Mutually exclusive applications.

(a) The Commission will consider applications to be mutually exclusive if their conflicts are such that the grant of one application would effectively preclude by reason of harmful electrical interference, or other practical reason, the grant of one or more other applications.

(b) An application for an NGSO-like space station license, within the meaning of Section 25.157 of this Chapter, will be entitled to comparative consideration with one or more conflicting applications only if:

(1) The application is mutually exclusive with another NGSO-like space station application; and

(2) The application is received by the Commission in a condition acceptable for filing by the "cut-off" date specified in a public notice.

(c) An application for a GSO-like space station license, within the meaning of Section 25.158 of this Chapter, will be entitled to comparative consideration with one or more conflicting applications only if:

(1) The application is mutually exclusive with another GSO-like space station application; and

(2) The application is received by the Commission in a condition acceptable for filing at the same millisecond as another GSO-like space station application with which it is mutually exclusive.

22. Amend § 25.156 by adding paragraph (d) to read as follows:

§ 25.156 Consideration of applications.

* * * * *

(d)(1) Applications for NGSO-like satellite systems will be considered pursuant to the procedures set forth in Section 25.157 of this part.

(2) Applications for GSO-like satellite systems will be considered pursuant to the procedures set forth in Section 25.158 of this part.

(3) Applications for NGSO-like satellite and GSO-like systems employing two or more service bands will be treated like separate applications for each service band, and each service band request will be considered pursuant to Section 25.157 or Section 25.158, as appropriate.

(4) Applications for feeder link authority or intersatellite link authority will be treated like an application separate from its associated service band. Each feeder link request or intersatellite link request will be considered pursuant to the procedure applicable to the associated service band request.

(5) In cases where the Commission has not adopted frequency-band specific service rules, the Commission will not consider NGSO-like applications after it has granted a GSO-like application, and it will not consider GSO-like applications after it has granted an NGSO-like application, unless and until the Commission establishes NGSO/GSO sharing criteria for that frequency band. In the event that the Commission receives NGSO-like applications and GSO-like applications at the same time, and the Commission has not adopted sharing criteria in that band, the Commission will divide the spectrum between GSO-like and NGSO-like licensees based on the proportion of qualified GSO-like and NGSO-like applicants.

(6) An application for DBS or DARS services will be entitled to comparative consideration with one or more conflicting applications only if:

- (i) The application is mutually exclusive with another application; and
- (ii) The application is received by the Commission in a condition acceptable for filing by the "cut-off" date specified in a public notice.

23. Amend part 25 by adding § 25.157 to read as follows:

§ 25.157 Consideration of NGSO-like satellite applications.

(a) This section specifies the Commission's procedures for considering license applications "NGSO-like satellite systems." For purposes of this section, the term "NGSO-like satellite system" is defined as:

- (1) All NGSO satellite systems, and
- (2) All GSO MSS satellite systems, in which the satellites are designed to communicate with earth stations with omni-directional antennas.

(b) Each NGSO-like satellite system application will be reviewed to determine whether it is acceptable for filing within the meaning of Section 25.112 of this Chapter. Any application that is not acceptable for filing would be returned to the applicant.

(c) Each NGSO-like satellite system application that is acceptable for filing will be reviewed to determine whether it is a "competing application," *i.e.*, filed in response to a public notice initiating a processing round, or a "lead application," *i.e.*, all other NGSO-like satellite system applications.

(1) Competing applications that are acceptable for filing will be placed on public notice to provide interested parties an opportunity to file pleadings in response to the application pursuant to Section 25.154 of this Chapter.

(2) Lead applications that are acceptable for filing will be placed on public notice. This public notice will initiate a processing round, establish a cut-off date for competing NGSO-like satellite system applications, and provide interested parties an opportunity to file pleadings in response to the application pursuant to Section 25.154 of this Chapter.

(d) After review of each of the applications in the processing round, and all the pleadings filed in response to each application, the Commission will grant all the applications that meet the standards of Section 25.156(a) of this Chapter, and deny the other applications.

(e) (1) In the event that there is insufficient spectrum in the frequency band available to accommodate all the qualified applicants in a processing round, the available spectrum will be divided equally among the licensees whose applications are granted pursuant to paragraph (d) of this Section, except as set forth in paragraph (e)(2) or (e)(3) of this Section.

(2) In cases where there are only one or two applications in a processing round granted pursuant to paragraph (d) of this Section, each applicant will be assigned 1/3 of the available spectrum, and the remaining spectrum will be made available to other licensees in an additional processing round pursuant to paragraph (c) of this Section.

(3) In cases where there are three or more applications in a processing round granted pursuant to paragraph (d) of this Section, and one or more applicants apply for less spectrum than they would be warranted under paragraph (e)(1) of this Section, those applicants will be assigned the bandwidth amount they requested in their applications. In those cases, the remaining qualified applicants will be assigned the lesser of the amount of spectrum they requested in their applications and the amount spectrum that they would be assigned if the available spectrum were divided equally among the remaining qualified applicants.

(f) (1) Each licensee will be allowed to select the particular band segment it wishes to use no earlier than 60 days before they plan to launch the first satellite in its system, and no later than 30 days before that date, by submitting a letter to the Secretary of the Commission. The licensee shall serve copies of this letter to the other participants in the processing round pursuant to Section 1.47 of this title.

(2) The licensee shall request contiguous bandwidth in both the uplink and downlink band. Each licensee's bandwidth selection in both the uplink and downlink band shall not preclude other licensees from selecting contiguous bandwidth.

(3) If two or more licensees in a processing round request the same band segment, all licensees other than the first one to request that particular band segment will be required to make another selection.

(g) (1) In the event that an applicants' license is cancelled for any reason, the Commission will redistribute the bandwidth allocated to that applicant equally among the remaining applicants whose licenses were granted concurrently with the cancelled license, unless the Commission determines that such a redistribution would not result in a sufficient number of licensees remaining to make reasonably efficient use of the frequency band.

(2) In the event that the redistribution of bandwidth set forth in paragraph (g)(1) of this section would not result in a sufficient number of licensees remaining to make reasonably efficient use of the frequency band, the Commission will issue a public notice initiating a processing round, as set forth in paragraph (c) of this section, to invite parties to apply for an NGSO-like satellite system license to operate in a portion of the bandwidth made available as a result of the cancellation of the initial applicant's license. Parties already holding licenses to operate an NGSO-like satellite system in that frequency band will not be permitted to participate in that processing round.

(3) There is a presumption that three satellite licensees in a frequency band are sufficient to make reasonably efficient use of the frequency band.

(h) Services offered pursuant to an NGSO-like license in a frequency band granted before the Commission has adopted frequency-band-specific service rules for that band will be subject to the default service rules in Section 25.217 of this part.

24. Amend part 25 by adding § 25.158 to read as follows:

§ 25.158 Consideration of GSO-like satellite applications.

(a) This section specifies the Commission's procedures for considering license applications "GSO-like satellite systems." For purposes of this section, the term "GSO-like satellite system" is defined as a GSO satellite designed to communicate with earth stations with directional antennas. Examples of GSO-like satellite systems are those which use earth stations with antennas with directivity towards the satellites, such as FSS, and MSS feeder links which use GSO satellites. GSO-like satellite systems are satellite systems that are not NGSO-like satellite systems within the meaning of Section 25.157(a).

(b) Applications for GSO-like satellite system licenses will be placed in a queue and considered in the order that they are filed, pursuant to the following procedure:

(1) The application will be reviewed to determine whether it is acceptable for filing within the meaning of Section 25.112 of this Chapter. If not, the application will be returned to the applicant.

(2) If the application is acceptable for filing, the application will be placed on public notice pursuant to Section 25.151 of this Chapter, and interested parties will be given an opportunity to file pleadings pursuant to Section 25.154 of this Chapter.

(3) The application will be granted only if it meets each of the following criteria:

(i) After review of the application and any pleadings filed in response to that application, the Commission finds that the application meets the standards of Section 25.156(a) of this Chapter; and

(ii) The proposed satellite will not cause harmful interference to any previously licensed operations.

(c) An applicant for a GSO-like satellite system license is not allowed to transfer, assign, or otherwise permit any other entity to assume its place in any queue.

(d) In the event that two or more GSO-like satellite system license applications are mutually exclusive within the meaning of Section 25.155(c) of this Chapter, the Commission will consider those applications pursuant to the following procedure:

(1) Each application will be reviewed to determine whether it is acceptable for filing within the meaning of Section 25.112 of this Chapter. Any application not found acceptable for filing will be returned to the applicant.

(2) All applications that are acceptable for filing will be placed on public notice pursuant to Section 25.151 of this Chapter, and interested parties will be given an opportunity to file pleadings pursuant to Section 25.154 of this Chapter.

(3) Each application will be granted if it meets the criteria of paragraph (b)(3), and otherwise will be denied.

(4) In the event that two or more applications are granted pursuant to paragraph (e)(3) of this Section, the available bandwidth at the orbital location or locations in question will be divided equally among those licensees.

(5) Licensees whose licenses are granted pursuant to paragraph (c)(4) will be allowed to select the particular band segment it wishes to use no earlier than 60 days before they plan to launch the first satellite in its system, and no later than 30 days before that date, by submitting a letter to the Secretary of the Commission. The licensee shall serve copies of this letter to the other participants in the processing round pursuant to Section 1.47 of this title.

(6) Licensees whose licenses are granted pursuant to paragraph (c)(4) shall request contiguous bandwidth in both the uplink and downlink band. Each licensee's bandwidth selection shall not preclude other licensees from selecting contiguous bandwidth.

(7) If two or more licensees whose licenses are granted pursuant to paragraph (c)(4) request the same band segment, all licensees other than the first one to request that particular band segment will be required to make another selection.

(e) Services offered pursuant to a GSO-like license in a frequency band granted before the Commission has adopted frequency-band-specific service rules for that band will be subject to the default service rules in Section 25.217 of this part.

25. Amend part 25 by adding § 25.159 to read as follows:

§ 25.159 Limits on pending applications and unbuilt satellite systems.

(a) Applicants with a total of five applications for GSO-like space station licenses on file with the Commission in a particular frequency band, or a total of five licensed-but-unbuilt GSO-like space stations in a particular frequency band, or a combination of pending GSO-like applications and licensed-but-unbuilt GSO-like space stations in a particular frequency band that equals five, will not be permitted to apply for another GSO-like space station license in that frequency band.

(b) Applicants with an application for one NGSO-like satellite system license on file with the Commission in a particular frequency band, or one licensed-but-unbuilt NGSO-like satellite system in a particular frequency band, will not be permitted to apply for another NGSO-like satellite system license in that frequency band.

(c) If an applicant has an attributable interest in one or more other entities seeking one or more space station licenses, the pending applications and licensed-but-unbuilt satellite systems filed by those other entities will be counted as filed by the applicant for purposes of the limits on the number of pending space station applications and licensed-but-unbuilt satellite systems in this paragraph. For purposes of this paragraph, an applicant has an "attributable interest" in another entity if

(1) it holds equity (including all stockholdings, whether voting or nonvoting, common or preferred) and debt interest or interests, in the aggregate, exceed thirty-three (33) percent of the total asset value (defined as the aggregate of all equity plus all debt) of that entity, or

(2) it holds a controlling interest in that entity, or is the subsidiary of a party holding a controlling interest in that entity, within the meaning of 47 C.F.R. § 1.2110(b)(2).

(3) For purposes of paragraphs (c)(1) and (c)(2), ownership interests shall be calculated on a fully diluted basis, *i.e.*, all agreements, such as warrants, stock options, and convertible debentures, will generally be treated as if the rights thereunder already have been fully exercised.

(d) In the event that a licensee misses three or more milestones within any three-year period, the Commission will presume that the licensee obtained one or more of those licenses for speculative purposes. Unless the licensee rebuts this presumption, it will not be permitted to apply for a GSO-like satellite or an NGSO-like satellite system in any frequency band if it has two or more satellite applications pending, or two licensed-but-unbuilt satellite systems of any kind. This limit will remain in effect until the licensee provides adequate information to demonstrate that it is very likely to construct its licensed facilities if it were allowed to file more applications.

(e) For purposes of this section, "frequency band" means one of the paired frequency bands available for satellite service listed in Section 25.202 of this Chapter.

26. Amend § 25.161 by revising paragraph (a) to read as follows:

§ 25.161 Automatic termination of station authorization.

A station authorization shall be automatically terminated in whole or in part without further notice to the licensee upon:

(a)(1) Failure to meet any applicable milestone for implementation of the licensed satellite system specified in Sections 25.164(a) or (b) of this Chapter, without demonstrating that the failure was caused by circumstances beyond the licensee's control, or

(2) If there are no applicable milestones for implementation of the licensed satellite system specified in Sections 25.164(a) or (b) of this Chapter, the expiration of the required date of completion of construction or other required action specified in the authorization, or after any additional time authorized by the Commission, if a certification of completion of the required action has not been filed with the Commission unless a request for an extension of time has been filed with the Commission but has not been acted on;

* * * * *

27. Amend part 25 by adding § 25.164 to read as follows:

§ 25.164 Milestones.

(a) Licensees of geostationary orbit satellite systems other than DBS and DARS satellite systems, including GSO MSS satellite systems, licensed on or after **[insert effective date of rule]** will be required to comply with the schedule set forth below in implementing their satellite systems, unless a different schedule is established by this Chapter, or by Commission Order, or by Order adopted pursuant to delegated authority. These dates are to be measured from the date the license is issued.

One year: Enter into a binding non-contingent contract to construct the licensed satellite system.

Two years: Complete the critical design review of the licensed satellite system.

Three years: Begin the construction of the satellite.

Five years: Launch and operate the satellite.

(b) Licensees of non-geostationary orbit satellite systems other than DBS and DARS satellite systems licensed on or after **[insert effective date of rule]** will be required to comply with the schedule set forth below in implementing their satellite systems, unless a different schedule is established by this Chapter, or by Commission Order, or by Order adopted pursuant to delegated authority. These dates are to be measured from the date the license is issued.

One year: Enter into a binding non-contingent contract to construct the licensed satellite system.

Two years: Complete the critical design review of the licensed satellite system.

Two years, six months: Begin the construction of the first satellite in the licensed satellite system.

Three years, six months: Launch and operate the first satellite in the licensed satellite system.

Six years: Bring all the satellites in the licensed satellite system into operation.

(c) Licensees of all satellite systems, other than DBS and DARS satellite systems, licensed on or after **[insert effective date of rule]**, will be required to submit a copy of their binding non-contingent contract with the Commission on or before the date scheduled for entering into such a contract.

(d) Licensees of all satellite systems, other than DBS and DARS satellite systems, licensed on or after **[insert effective date of rule]**, will be required to submit information to the Commission sufficient to demonstrate that the licensee has completed the critical design review of the licensed satellite system on or before the date scheduled for entering into such a contract.

(e) Licensees of all satellite systems, other than DBS and DARS satellite systems, licensed on or after **[insert effective date of rule]**, will be required to submit information to the Commission sufficient to demonstrate that the licensee has commenced physical construction of its licensed spacecraft.

(f) In cases where the Commission grants a satellite authorization in different stages, such as a license for a satellite system using feeder links or intersatellite links, the earliest of the milestone schedules shall be applied to the entire satellite system.

28. Amend § 25.210 by removing and reserving paragraphs (e) and (g), and revising paragraph (f) to read as follows:

§ 25.210 Technical requirements for space stations in the Fixed-Satellite Service.

* * * * *

(e) [reserved.]

(f) All space stations in the Fixed Satellite Service in the 3600-3700 MHz, 3700-4200 MHz, 5091-5250 MHz, 5825-5925 MHz, 5925-6425 MHz, 6425-6525 MHz, 6525-6700 MHz, 6700-7025 MHz, 10.7-10.95 GHz, 10.95-11.2 GHz, 11.2-11.45 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz, 12.2-12.7 GHz, 12.75-13.15 GHz, 13.15-13.2125 GHz, 13.2125-13.25 GHz, 13.75-14.0 GHz, 14.0-14.5 GHz and 15.43-15.63 GHz bands shall employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the same beam and/or the use of spatially independent beams.

(g) [reserved.]

* * * * *

29. Revise part 25 by adding new § 25.217 to read as follows:

§ 25.217 Default Service Rules.

(a) The technical rules in this section apply only to licenses to operate a satellite system in a frequency band granted after a domestic frequency allocation has been adopted for that frequency band, but before any frequency-band-specific service rules have been adopted for that frequency band.

(b) (1) For all NGSO-like satellite licenses for which the application was filed pursuant to the procedures set forth in Section 25.157 of this Chapter after **[insert effective date of this rule]**, authorizing operations in a frequency band for which the Commission has not adopted frequency band-specific service rules at the time the license is granted, the licensee will be required to comply with the following technical requirements, notwithstanding the frequency bands specified in these rule provisions: Sections 25.142(d), 25.143(b)(2)(ii), 25.143(b)(2)(iii), 25.204(g), 25.210(c), 25.210(d), 25.210(f), 25.210(i), 25.210(k), and 25.210(l) of this Chapter.

(2) In addition to the requirements set forth in paragraph (b)(1) of this paragraph, the Commission will coordinate with the National Telecommunications and Information Administration (NTIA) regarding the operations of any licensees authorized to operate in a shared government/non-government frequency band, pursuant to the procedure set forth in Section 25.142(b)(2)(ii) of this Chapter.

(3) Earth station licensees authorized to operate with one or more space stations described in paragraph (b)(1) of this paragraph shall comply with the requirements in Section 25.136 of this Chapter. In addition, earth station licensees authorized to operate with one or more space stations described in paragraph (b)(1) of this paragraph in frequency bands shared with terrestrial wireless services shall comply with the requirements in Section 25.203(c) of this Chapter.

(c) (1) For all GSO-like satellite licenses for which the application was filed pursuant to the procedures set forth in Section 25.158 of this Chapter after **[insert effective date of this rule]**, authorizing operations in a frequency band for which the Commission has not adopted frequency band-specific service rules at the time the license is granted, the licensee will be required to comply with the following technical requirements, notwithstanding the frequency bands specified in these rule provisions: Sections 25.142(d), 25.143(b)(2)(iv), 25.204(g), 25.210(c), 25.210(d), 25.210(f), 25.210(i), 25.210(j), 25.210(k), and 25.210(l) of this Chapter.

(2) In addition to the requirements set forth in paragraph (c)(1) of this paragraph, the Commission will coordinate with the National Telecommunications and Information Administration (NTIA) regarding the operations of any licensees authorized to operate in a shared government/non-government frequency band, pursuant to the procedure set forth in Section 25.142(b)(2)(ii) of this Chapter.

(3) Earth station licensees authorized to operate with one or more space stations described in paragraph (c)(1) of this paragraph shall comply with the earth station antenna performance verification requirements in Section 25.132 of this Chapter, and the antenna gain pattern requirements in Sections 25.209(a) and (b) of this Chapter. In addition, earth station licensees authorized to operate with one or more space stations described in paragraph (c)(1) of this paragraph in frequency bands shared with terrestrial wireless services shall comply with the requirements in Section 25.203(c) of this Chapter.

(4) In addition to the requirements set forth in paragraph (c)(3) of this paragraph, earth station licensees with a gain equivalent or higher than the gain of a 1.2 meter antenna operating in the 14.0-14.5 GHz band, authorized to operate with one or more space stations described in paragraph (c)(1) of this paragraph in frequency bands greater than 14.5 GHz shall be required to comply with the antenna input power density requirements set forth in Section 25.212(c) of this Chapter.

(d) Applicants requesting authorization of a satellite subject to paragraphs (b) or (c) of this section must submit a narrative statement describing the debris mitigation design and operational strategies, if any, that they will use. Applicants are specifically required to submit a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the spacecraft.

(e) In the event that the Commission adopts frequency band-specific service rules for a particular frequency band after it has granted one or more space station or earth station licenses for operations in that frequency band, those licensees will be required to come into compliance with the frequency band-specific service rules within 30 days of the effective date of those rules, unless otherwise specified by Commission or Bureau Order.

APPENDIX C

Default Service Rules

Below is a list of current Part 25 rules that we will apply as default service rules in cases where we grant satellite license applications in frequency bands for which we have not adopted frequency band-specific service rules. These requirements are also set forth in Section 25.217, a new rule set forth in Appendix B to this Order.

Default Service Rules for NGSO-Like Satellite Licenses

<u>Rule Section</u>	<u>Additional Provisions</u>
25.136	Standards for mobile earth stations licensed to operate with these satellites.
25.142(b)(2)(ii)	Coordination in shared government/non-government frequency bands.
25.142(d)	Prohibition of certain agreements.
25.143(b)(2)(ii)	Geographic service area requirements.
25.143(b)(2)(iii)	Geographic service area requirements.
25.204(g)	Power level requirements.
25.210(c)	Ability to change saturation flux densities in 4 dB steps over a 12 dB range.
25.210(d)	Orthogonal polarization.
25.210(f)	Full Frequency Reuse.
25.210(i)	Cross-polarization isolation of at least 30 dB.
25.210(k)	Co-polarized and cross-polarized antenna measurements required.
25.210(l)	Annual reports.

Default Service Rules for GSO-Like Satellite Licenses

<u>Rule Section</u>	<u>Additional Provisions</u>
25.132	Earth station performance verification requirements for earth stations licensed to operate with these satellites.
25.142(b)(2)(ii)	Coordination in shared government/non-government frequency bands.
25.142(d)	Prohibition of certain agreements.
25.143(b)(2)(iv)	Geographic service area requirements.
25.204(g)	Power level requirements.
25.209(a), (b)	Earth station antenna gain pattern requirements.
25.210(c)	Ability to change saturation flux densities in 4 dB steps over a 12 dB range.
25.210(d)	Orthogonal polarization.
25.210(f)	Full Frequency Reuse.
25.210(i)	Cross-polarization isolation of at least 30 dB.
25.210(j)	Station keeping.
25.210(k)	Co-polarized and cross-polarized antenna measurements required.
25.210(l)	Annual reports.
25.212(c)	EIRP limits applicable to earth stations licensed to operate with these satellites in frequency bands greater than 14.5 GHz.

APPENDIX D

FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rule Making (Notice)* in IB Docket No. 02-34.² The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the First Report and Order

The objective of the *First Report and Order* is to develop satellite licensing procedures that enable the Commission to license satellites more quickly than is possible under the current procedure. We need to adopt new satellite licensing procedures because, among other things, the current space station licensing procedure was developed in 1983, and it impedes U.S. satellite operators' compliance with recently adopted ITU rules. The need for new satellite licensing procedures is explained fully in Section IV.A. of the *First Report and Order*.

B. Summary of Significant Issues Raised by Public Comments In Response to the IRFA

No comments were submitted in response to the IRFA.

C. Description and Estimate of the Number of Small Entities To Which Rules Will Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules, if adopted.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁵ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁶ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁷ A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."⁸

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² Amendment of the Commission's Space Station Licensing Rules and Policies, *Notice of Proposed Rulemaking*, IB Docket No. 02-34, 17 FCC Rcd 3847 (2002) (*Space Station Reform NPRM or Notice*).

³ See 5 U.S.C. § 604.

⁴ 5 U.S.C. § 604(a)(3).

⁵ *Id.* § 601(6).

⁶ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

⁷ Small Business Act, 15 U.S.C. § 632 (1996).

⁸ 5 U.S.C. § 601(4).

Nationwide, as of 1992, there were approximately 275,801 small organizations.⁹ "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."¹⁰ As of 1992, there were approximately 85,006 such jurisdictions in the United States.¹¹ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.¹² The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities. Below, we further describe and estimate the number of small entity licensees that may be affected by the proposed rules, if adopted.

The rules adopted in this *First Report and Order* affect satellite operators. The Commission has not developed a definition of small entities applicable to satellite operators. Therefore, the applicable definition of small entity is generally the definition under the SBA rules applicable to Satellite Telecommunications.¹³ This definition provides that a small entity is expressed as one with \$11.0 million or less in annual receipts.¹⁴ 1997 Census Bureau data indicate that, for 1997, 273 satellite communication firms had annual receipts of under \$10 million. In addition, 24 firms had receipts for that year of \$10 million to \$24,999,990.¹⁵

In addition, Commission records reveal that there are approximately 240 space station operators licensed by this Commission. We do not request or collect annual revenue information, and thus are unable to estimate of the number of licensees that would constitute a small business under the SBA definition. Small businesses may not have the financial ability to become space station licensees because of the high implementation costs associated with satellite systems and services.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

In this *First Report and Order*, the Commission adopts a mandatory electronic filing requirement for space station license applicants. The Commission believes that filing satellite license applications electronically is no more burdensome than submitting paper applications, because a majority of satellite applicants currently file their applications electronically on a voluntary basis.

None of the other rules adopted in this *First Report and Order* are expected to increase the reporting, record keeping and other compliance requirements of any licensee.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

⁹ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

¹⁰ 5 U.S.C. § 601(5).

¹¹ U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

¹² *Id.*

¹³ "This industry comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Small Business Administration, 1997 NAICS Definitions, NAICS 513340.

¹⁴ 13 C.F.R. § 120.121, NAICS code 513340.

¹⁵ U.S. Census Bureau, 1997 Economic Census, Subject Service: Information, "Establishment and Firm Size," Table 4, NAICS 513340 (Issued Oct. 2000).

The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”¹⁶

In this proceeding, we adopt rule revisions designed to allow the Commission to issue satellite licenses faster than is now possible, which will enable satellite operators to provide service faster, and to attract investors faster. This will have a positive economic impact on all satellite licensees, including small entities.

In the *Notice of Proposed Rulemaking*, the Commission proposed applying a first-come, first-served procedure to all satellite applications, including non-geostationary satellite applications. In the *First Report and Order*, the Commission concluded that applying a first-come, first-served procedure to non-geostationary satellite applications could enable one applicant to unreasonably exclude others, including small entities, from the market. Accordingly, the Commission rejected this proposal. See Section V.B. of the *First Report and Order*.

Report to Congress: The Commission will send a copy of the *First Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of the *First Report and Order*, including FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *First Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register. See 5 U.S.C. § 604(b).

¹⁶ 5 U.S.C. § 603(c)(1) – (c)(4).

APPENDIX E

INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA),¹ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this Further Notice of Proposed Rulemaking. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Further Notice of Proposed Rulemaking provided above in Section XI. The Commission will send a copy of the Further Notice of Proposed Rulemaking, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. *See* 5 U.S.C. § 603(a). In addition, the Further Notice of Proposed Rulemaking and IRFA (or summaries thereof) will be published in the Federal Register. *See id.*

A. Need for, and Objectives of, the Proposed Rules

The objective of the proposed rules is to discourage parties from filing "speculative" satellite applications, *i.e.*, applying for a satellite license without intending to construct the satellite facilities. These rule revisions are needed because speculative satellite applications can delay or preclude other parties from obtaining a satellite license and providing service to the public.

B. Legal Basis

The proposed action is supported by Sections 4(i), 7(a), 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 157(a), 303(c), 303(f), 303(g), 303(r).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules, if adopted.² The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."³ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁴ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁵ A small organization is generally "any not-for-profit

¹ *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² 5 U.S.C. § 603(b)(3).

³ *Id.* § 601(6).

⁴ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

⁵ Small Business Act, 15 U.S.C. § 632 (1996).

enterprise which is independently owned and operated and is not dominant in its field."⁶ Nationwide, as of 1992, there were approximately 275,801 small organizations.⁷ "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."⁸ As of 1992, there were approximately 85,006 such jurisdictions in the United States.⁹ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.¹⁰ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities. Below, we further describe and estimate the number of small entity licensees that may be affected by the proposed rules, if adopted.

The rules proposed in this Notice of Proposed Rulemaking would affect satellite operators, if adopted. The Commission has not developed a definition of small entities applicable to satellite operators. Therefore, the applicable definition of small entity is generally the definition under the SBA rules applicable to Satellite Telecommunications.¹¹ This definition provides that a small entity is expressed as one with \$11.0 million or less in annual receipts.¹² 1997 Census Bureau data indicate that, for 1997, 273 satellite communication firms had annual receipts of under \$10 million. In addition, 24 firms had receipts for that year of \$10 million to \$24,999,990.¹³

In addition, Commission records reveal that there are approximately 240 space station operators licensed by this Commission. We do not request or collect annual revenue information, and thus are unable to estimate of the number of licensees that would constitute a small business under the SBA definition. Small businesses may not have the financial ability to become space station licensees because of the high implementation costs associated with satellite systems and services.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

In this Further Notice of Proposed Rulemaking, the Commission invites comment on whether to revise the bond requirement adopted in the First Report and Order in this proceeding. None of the proposed revisions are intended to increase the projected reporting, record keeping, or other compliance requirements associated with the bond requirement.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

⁶ 5 U.S.C. § 601(4).

⁷ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

⁸ 5 U.S.C. § 601(5).

⁹ U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

¹⁰ *Id.*

¹¹ "This industry comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Small Business Administration, 1997 NAICS Definitions, NAICS 513340.

¹² 13 C.F.R. § 120.121, NAICS code 513340.

¹³ U.S. Census Bureau, 1997 Economic Census, Subject Service: Information, "Establishment and Firm Size," Table 4, NAICS 513340 (Issued Oct. 2000).

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. 5 U.S.C. § 603(c).

We have attempted not to foreclose any option. In addition, we invite comment on allowing licensees to create an escrow account as an alternative to a bond requirement. We also invite interested parties to propose alternatives for a standard for a waiver of the bond requirement for licensees providing public safety services, including small entities.

F. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rules

None.

